

# **Possible Selves in Social Context**

by

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## **DECLARATION**

Student number: 31002846

I, Nonhlanhla Masinga (31002846), declare that the thesis “Possible Selves in Social Context” is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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SIGNATURE

(Miss)

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DATE

## Table of Contents

Declaration .....	ii
Table of Contents .....	iii
List of Tables .....	v
List of Figures .....	vi
Acknowledgement .....	vii
ABSTRACT .....	1
INTRODUCTION .....	2
The Theory of Possible Selves .....	4
Possible selves domains .....	7
Balanced possible selves .....	8
Strategies for possible selves .....	9
Possible Selves amongst Adolescents .....	11
The domains of adolescents' possible selves .....	12
Balanced possible selves for adolescents .....	16
Strategies of adolescents' possible selves .....	18
Social Factors influencing Possible Selves .....	19
Race and ethnicity .....	19
Gender .....	21
The school environment .....	21
Inequality as Social Context .....	24
Inequality from the perspective of the Justice Model .....	25
Inequality from the perspective of Social Dominance Theory .....	26
Concept of Collective Futures .....	31

Perceived collective continuity .....	32
Collective futures framework .....	33
<b>THE STUDY .....</b>	<b>35</b>
Participants .....	37
Procedure.....	38
Measurements .....	39
Collective future measurements .....	39
Inequality measurements .....	40
Possible Selves .....	43
Career orientations .....	48
<b>RESULTS .....</b>	<b>50</b>
Possible Selves .....	50
Preliminary analysis .....	50
Hypotheses Testing .....	51
Career orientations and Inequality.....	73
Preliminary analysis .....	73
Hypothesis testing .....	78
Collective Future as Societal Change.....	81
Preliminary analysis .....	81
Hypothesis testing .....	82
<b>GENERAL DISCUSSION .....</b>	<b>83</b>
<b>REFERENCES.....</b>	<b>97</b>
<b>APPENDIX.....</b>	<b>112</b>
A1 - Consent form for parents.....	112
A2 - Ethical approval letter from the Department of Education.....	114

## LIST OF TABLES

	Pages
Table 1. Classification and coding of possible selves.....	44
Table 2. Interrater reliabilities for the different possible selves.....	46
Table 3. Classification and coding for career orientations.....	49
Table 4. Frequency of possible selves .....	52
Table 5. Means of the domain scores.....	54
Table 6. Means, standard deviation and t-test statistics of possible selves for social factors....	65
Table 7. Distribution of positive only, negative only and balanced possible selves.....	68
Table 8. Means and standard deviations of the strategy scores to achieve the positive possible selves .....	70
Table 9. Means and standard deviations of the strategy scores to avoid the negative possible selves .....	71
Table 10. Distribution of participants reporting hierarchy-enhancing, middle-class, and hierarchy- attenuating careers.....	74
Table 11. Means and standard deviations of the inequality measures .....	75
Table 12. Means and standard deviations of the collective futures dimensions .....	81

## LIST OF FIGURES

	Pages
Figure 1. Estimated marginal means of the different domains .....	56
Figure 2. Estimates marginal means of the different domains for male and female participants .....	58
Figure 3. Estimated marginal means of the different domains for Black and white participants .....	60
Figure 4. Estimated marginal means of the different domains for suburb and township school participants .....	61

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## **ABSTRACT**

South Africa has been going through severe social changes over the past two decades. In light of these changes the present study aimed to understand adolescents' expectations of their personal future. Based on the Theory of Possible Selves (Markus & Nurius, 1986) the present research addressed the overall question whether adolescents' personal future plans incorporate the views they share about the present and the future of their social context. Social context was not only limited to factors such as gender, ethnicity and school environment, but also included both the daily lived experiences of inequality, as is the case in South Africa, and the projected social context of the future. A total of 631 pupils from four Gauteng high schools took part in this cross sectional study. The results support the hypotheses especially within the possible selves' domain of academic achievement. The interrelatedness between possible selves and shared beliefs about the future of South Africa could, however, not be demonstrated.

*Keywords:* Possible Selves, Collective Futures Framework, Adolescence, Social Dominance Theory, South Africa

## INTRODUCTION

A person builds up a knowledge base about him/herself based on various sources of information available (Baumeister, 1998). This collection of beliefs about oneself is also known as the self-concept. Self-concepts are what we think about when we think about ourselves. They carry an answer to the question, “Who am I?” (Oyserman & Fryberg, 2006). Understanding oneself by considering who one was in the past, who one is currently, and who one may become in the future is an important process in a person’s development in life (Clinkinbeard & Murray, 2011; Oyserman & Fryberg, 2006). Understanding “who one is” and “who one may become in the future” helps a person to make sense of his/her surroundings and to make choices because the self is an important perceptual, motivational and self-regulatory tool (Oyserman, Elmore, & Smith, 2012, p. 69). This understanding represents the heart of the Theory of Possible Selves by Markus and Nurius (1986) which builds on the notion of self-knowledge. Possible selves are people’s projections of the selves they would like to become, the selves they might become and the selves they are afraid of becoming (Markus & Nurius, 1986, p. 954).

Possible selves are an important psychological construct particularly for adolescents in planning their future. Studies conducted with different age groups have shown that adolescents report not only a broader variety but also a great number of possible selves (whether positive or negative possible selves) compared to other age groups (Cross & Markus, 1991). Possible selves serve as incentives for the future self as they give a person a reason to work towards achieving the selves they aspire to and ensure that they avoid the selves they fear of becoming (Oyserman & Markus, 1990a; Oyserman & Saltz, 1993). Previous research has shown that individuals who are aware that there are also negative, temporary setbacks in achieving their positive possible selves are more likely to develop concrete plans, roadmaps or strategies that influence current behaviour towards the desired

end-goal (Lee & Oyserman, 2009; Destin & Oyserman, 2010; Oyserman, Bybee, Terry & Hart-Johnson, 2004). Moreover, previous research has shown that although possible selves of adolescents are universal they are influenced by social factors such as gender, race/ethnicity and school environment (Cross & Markus, 1991; Kao, 2000; Knox, Funk, Elliot & Bush, 2000; Unemori, Omoregie & Markus, 2004).

Based on the Theory of Possible Selves (Markus & Nurius, 1986) and related research the present research aimed to study the possible selves of South African adolescents. Beyond previous research, the present research aimed to broaden the concept of social context by considering not only the influence of social factors such as gender, ethnicity and school environment but also how the concrete social context is perceived and experienced. The latter was theoretically conceptualised in two ways: first as present social context and second as social context expected for the distant future. The conceptualisation of the present social context was guided by the facts that South Africa with an estimated Gini co-efficient of 0.7, is one of the most unequal societies in the world (De Jager, Hofman, Khan, Volmink & Jina, 2012; Leibbrandt, Finn & Woolard, 2012) and that South Africa's inequality is based on long-standing racial and economic divides (Human Sciences Research Council [HSRC], 1987). Thus the present study aimed to extend our understanding how adolescents' perception of inequality influences their possible selves. The future social context was conceptualized as shared expectations adolescents hold about the future of South Africa and how these expectations influence their possible selves.

The present research is considered as relevant not only because studies of possible selves of the South African youth are scarce (see also Van Breda, 2010), but also because studying possible selves among South African adolescents might provide a better understanding of their thoughts for parents, teachers and counsellors to be able to assist these adolescents in planning their futures, especially their career development strategies.

## **The Theory of Possible Selves**

According to the theory, possible selves are future-oriented cognitive components of the self-concept including a person's fears, hopes, plans, goals and potentials for their future (Markus & Nurius, 1986; Oyserman, Terry, & Bybee, 2002). Based on how an individual understands their own potential, possible selves form a link between an understanding of one's self-concept and motivation in thinking about one's future (Markus & Nurius, 1986, p. 954). Thus, possible selves are important as they provide a representation of the future self. They allow an individual to create ideas in their mind about where they think their own life story is going. They serve as incentives for the future self, that is, they give a person a reason to work towards the selves they should aspire to and the selves to be avoided. Possible selves are also important in that they provide an "evaluative and interpretive context" for the current view of the self (Markus & Nurius, 1986, p. 955).

When imagining and reflecting on the future, three essential forms of possible selves are assumed to be constructed: the selves we hope to become (i.e., hoped-for possible selves), the selves we fully expect we will become (i.e., expected possible selves) and the selves we are afraid of becoming (i.e., feared possible selves; Chalk, Meara, Day, & Davis, 2005; Cross & Markus, 1991; Markus & Nurius, 1986; Markus & Ruvolo, 1989; Oyserman & Fryberg, 2006).

As mentioned before, the Theory of Possible Selves expands on the notion of self-knowledge. Markus (1977) proposed that in an attempt to organise, summarise or explain what one knows about oneself in a particular area of life, cognitive structures about the self, known as self-schema, are formed. These self-schemas are created from an individual's past experience in a specific life area; they reflect what a person thinks and cares about as well as what they spend their energy on (Markus & Nurius, 1986; Oyserman & Markus,

1990a). As cognitive structures, self-schemas direct attention to what will be most relevant to a person in the environment, and even influence what is remembered and recalled from the environment (Oyserman, 2007). Early research conducted by Markus (1977) showed that if a person has developed self-schemas in a particular domain; a) the person is able to process information about the self in that specific domain with relative ease; b) they are readily able to retrieve information relevant for their behaviour in that domain; c) they can predict future behaviour in that domain; and d) they are able to resist schematic information which contradicts with the information they already have about themselves (Markus, 1977, p. 65). Furthermore, self-schemas include specific events and situations experienced by the individual in the past. These cognitions assist the individual in organising and guiding behaviour in an attempt to attain the desired future self (Markus, 1977, p. 65). Self-schemas represent patterns of behavior that have been observed repeatedly and have even generated a framework from which an individual can draw information when faced with current issues and to decide about future actions. Possible selves are therefore, the future-oriented components of self-schemas (Markus & Nurius, 1986, p. 955).

Possible selves characterise the complex dynamic self, that is, they present self-conceptions that are continually active in response to specific events, experiences or situations. Brewer and Gardner (1996, p. 83) proposed that different selves co-exist within an individual and are salient at different times, in different situations and different contexts. These authors introduced three levels of self-representations which are the individual self, the relational self and the collective self (Brewer & Gardner, 1996). The individual self is how people define themselves based on their unique traits that differentiate them from others. This form of self-representation relies on interpersonal comparison processes and its main motive is that of psychological protection. An example of an individual's self-definition is introversion, where individuals are aware that their shyness stems from their

unique traits. The relational self is made up of the self-concept shared with significant others, and thus defines the type of role a person plays in that relationship. It is based on personalised bonds with significant others for example, the parent-child relationship, close friendships and the teacher-student relationships. Moreover, the relational self relies on the process of reflected appraisal, described as the way people come to think of themselves, based on what they believe significant others think of them. This self is motivated by protecting and maintaining important relationships with significant others (Sedikides & Brewer, 2001). In contrast, the collective self is achieved by being part of a larger social group/category and contrasting the group which one belongs to with another group (i.e., in-group versus out-group). The relationship bonds may be impersonal in nature because the group is too large. In other words, the individuals do not necessarily know each other personally. The self is shifted from the individual to that of being part of a social group and relies on intergroup comparison processes with the motive of protecting or enhancing the in-group and thus the positive social identity (Tajfel & Turner, 1986). All three levels of self-representations are essential when an individual defines him/ herself (Brewer & Gardner, 1996; Markus, 1977; Hicks & Holden, 2007). Consistent with Brewer and Gardner's (1996) level of self-representation, possible selves represent all levels of the self, that is, the individual self, the relational self and the collective self.

The Theory of Possible Selves (Markus & Nurius, 1986) proposes that possible selves are domain-specific. The salient domains are dependent upon a person's development and/or challenges that are deemed most important by the person (Markus & Nurius, 1986, p. 955). People have a number of age appropriate development domains, that is, developmental tasks and personal projects or roles that they engage in at any point in time (Havinghurst, 1972; Little, 1983). These domains are sometimes overlapping, where they can occur at the same time, or one domain leads to another domain. For example, a

teenager can be a child to a mother, but at the same time be a sibling. The same teenager can only become a mother when she leaves childhood as a domain. Consequently, possible selves are linked to an individual's different roles and identities that have to be fulfilled. On imagining a future self, individuals refer to their current developmental stages and choose possible selves that are in line with the domains that are most important in their lives (Oyserman & James, 2009; Oyserman & Markus, 1990a, 1990b). Therefore, possible selves are likely to develop in domains that are relevant to current life tasks (Oyserman & Markus, 1990a).

### **Possible selves domains**

Domains of possible selves are conceptualised from an individual's current concerns, based on their life stages (Klinger, 1977). Domains that have been identified in previous studies include family, physical, lifestyle, health, leisure, independence or dependence, success, and caregiving (Frazier, Hooker, Johnson & Kaus, 2000).

Research conducted with young adults indicated that their possible selves were mainly located in the domains of education, career, family and success (Arnett, 2000; Hooker, 1992; Oyserman & Markus, 1990a; Oyserman & Fryberg, 2006; Rossiter, 2007). In a study with participants ranging from 60 to 80 years of age, Frazier et al. (2002) demonstrated that for older people, health-related issues become more salient. Thus the health domain becomes more important later in life, where health-promotion and health-protecting behaviours serve as motivators of current behaviour (Hooker, 1992; Hooker & Kaus, 1994). Moreover, Markus and Hertzog (1992) reported that older adults mentioned fewer possible selves. This is because as one ages, areas that are worth improving become limited, that is, the catalogue of available possible selves gets to be more focused (Frazier et al., 2002). The older generation adults' feared possible selves include being sent to a retirement village, being disabled or physically dependent (Cross & Markus, 1991; Hooker,

1992; Hooker & Kaus, 1994), being injured, losing a spouse or facing change in living conditions (Frazier et al., 2000). Middle-aged adults, however, mentioned possible selves in the occupational, material and family-related domains (Hooker & Kaus, 1994).

In line with the Theory of Possible Selves, Oyserman and Markus (1990a) proposed that possible selves are most effective when balanced with a countervailing possible self in the same domain.

### **Balanced possible selves**

When imagining the future, individuals are able to consider both positive and negative outcomes (Markus & Nurius, 1986; Oyserman & Markus, 1990b). A positive outcome allows an individual to face any challenges with an understanding that these are only temporary setbacks, with the confidence that success is inevitable (Peters, Flink, Boersma, & Linton, 2010). A negative outcome has been found to be important in future thinking, because it gives an individual the necessary cognitive tools to prepare for any setbacks and in a way reduces negative outcomes (Sweeney, Carroll & Shepperd, 2006). This is because possible selves make it easier for individuals to keep their goal in mind and be reminded that should they lose focus they will end up becoming the negative self they would rather avoid (Oyserman & Markus, 1990a, 1990b).

In order to assess the balance between positive and negative possible selves, expected rather than hoped-for selves are paired with feared selves. This is because expected selves are based on what an individual knows about him/herself, that is, they are shaped by a person's reality (Oyserman & Markus, 1990a). Hoped-for selves, on the other hand, are based on desires, which are sometimes unlikely, based on fantasies and/or dreams (Lee & Oyserman, 2009b).

For possible selves to be "balanced", individuals are expected to acknowledge or be aware that there are both positive and negative aspects of the possible self in the same



domain (Oyserman & Fryberg, 2006; Oyserman & Markus, 1990b; Oyserman & Saltz, 1993). An example for a positive expected possible self would be, “I expect to do well in school” and for a feared, to be avoided possible self, “I fear not finishing my high school education”. Balanced possible selves allow individuals to strive for their goals but also being aware of their personal limitations that might delay the attainment of these goals (Oyserman & Markus, 1990b; Oyserman & Saltz, 1993). The balance between expected selves and feared selves increases motivation to achieve a desired self and thus avoid the undesired self (Robinson, Davis & Meara, 2003, p. 157). In particular, feared selves are more effective motivators when they are balanced with clear and well developed expected positive possible selves that serve to outline the behavioural strategies to achieve the expected possible self and avoid the feared possible self (Unemori et al., 2004).

### **Strategies for possible selves**

Possible selves can increase a person’s optimism when imagining what is possible for them in the future. However, in order to sustain effort and lead to behaviour change, these possible selves are assumed to be linked to strategies in pursuit of the expected possible self and thus avoid the feared self (Lee & Oyserman, 2009a; Oyserman & Fryberg, 2006). The individual is not only aware of expectations, but actually thinks about how and/or which strategies to employ to ensure reaching the possible self. In other words, the person should behave in a manner which makes it possible for the individual to become the future self they expect to become, that is, making progress towards that particular self (Oyserman & James, 2009).

Creating concrete images of possible selves is important when identifying the actions required for achieving the desired outcomes (Wurf & Markus, 1991). Having a plan further focuses an individual’s attention towards attainment of an outcome. It focuses the individual to such an extent that other irrelevant, competing thoughts are muted (Oyserman

et al., 2004). Possible selves with self-defining outcomes and specific behavioural strategies are called self-regulatory possible selves. These possible selves are the most likely to influence behaviour (Hoyle & Sherrill, 2006). Oyserman et al. (2004) speculated that by both focusing and linking the goal to current action, the self-regulatory aspect of possible selves allows a person to maintain focus and ultimately push oneself towards the goal. For instance, Oettingen, Pak and Schnetter (2001) found that simply dreaming about a wonderful future without explicitly thinking about the gaps between the present and this future had no motivational effect. On the other hand, Oyserman and James (2009) found that reminding participants that a particular task had future usage without any specific relevant information about the future self, or any concrete justification of why the task was relevant, displayed no motivational effects either. This means that, although an individual may possess possible selves, this does not guarantee that they will persist and sustain effort towards the future self (Lee & Oyserman, 2009b; Destin & Oyserman, 2010).

With regards to the motivational and self-regulatory effects of strategies when choosing possible selves, most of the studies have been conducted with adolescents and young adults (Markus & Nurius, 1986; Oyserman et al., 2002; 2004; Ruvoilo & Markus, 1992). Yowell (2002) conducted a study with ninth grade Latino students as a minority group to understand their views of their possible selves. In her study the results indicated that these students were unable to provide clear, personalized plans for their expected possible selves.

Strategies are important for young people as they regulate behavior and allow individuals to focus on their goals while being aware of and planning for setbacks that might delay their progress (Peters et al., 2010). Moreover, the absence of detailed strategies has been shown to lead learners towards delinquency (Oyserman & Markus, 1990b).

Cross and Markus (1991) found that young in comparison to older participants reported the least number of actions that they would undertake to accomplish their hoped-for self or to prevent their feared self. Young people do not have the life experiences needed when evaluating the likelihood of attaining certain possible selves. Motivating young people to stay in school and also to help them formulate strategies that will lead to their desired possible self and avoiding becoming their feared possible self is imperative. Adolescence is a crucial developmental stage where one is free to create a number of possible selves. This then makes it difficult for these adolescents to single out a possible self that they should work towards (Oyserman & Fryberg, 2006).

Adolescence is a time when young people think about their future careers, and families, and think about belonging to a society, contributing to that future society and fitting in (Erikson, 1968; Seginer, 2009). At this stage of their lives, adolescents are at liberty to try out different roles and thus imagine possible future selves (Markus & Nurius, 1986).

### **Possible Selves amongst Adolescents**

Adolescence is a crucial time in a person's life. It affords a person the opportunity to transform their lives, and forms a bridge between childhood and adult roles (Erikson, 1968; Seginer, 2009). Adolescence is a time of decision-making and finding the self for the future. It is a period of self-discovery (Erikson, 1968; Kao, 2000). Adolescence is a time when young people conceptualise what they ideally want to become, what they expect to become and what they fear to become, or even, the adult they aim to avoid becoming (Chalk et al, 2005). Both one's current success and successes of people like oneself are useful in predicting who one may become (Erikson, 1968, Elmore & Oyserman, 2012).

According to Erikson (1968, p. 157), adolescence is a period viewed as “*psychosocial moratorium*”. Oyserman and Fryberg define psychosocial moratorium as the period that occurs when a person steps away from reality to actively search for their possible selves, to try out multiple possible selves or possible roles before committing to one (Oyserman & Fryberg, 2006, p. 8). A sense of self is established already in childhood, but with increased abstract reasoning as it occurs in adolescence, individuals establish a deeper sense of the self based on current appearance, skills and competencies (Oyserman & Fryberg, 2006, p. 2). Adolescents have a major task of finding out “who they are”, that is, to create and define a self that they and others can live with in the future (Oyserman & Markus, 1990a). In adolescence, possible and imagined future selves become the central focus in self-regulation and overall well-being (Cantor & Kihlstrom, 1987).

As outlined above, the Theory of Possible Selves (Markus & Nurius, 1986) states that possible selves are domain-specific. Since adolescence represents a specific development phase, it can be assumed that during this phase the relevant domains are specific too.

### **The domains of adolescents’ possible selves**

Future-oriented aspects of the self (i.e., possible selves) have also been conceptualised as “personal projects” (Little, 1983). Little’s personal projects analysis found that young adults’ domains were based on their immediate focus, namely, school, careers, and military call-ups. Studies that have been conducted as adaptations of the research of Little and colleagues, have confirmed that adolescents emphasise academic success (Oyserman, Brickman & Rhodes, 2007; Oyserman, Bybee, & Terry, 2006; Oyserman, Terry, & Bybee, 2002), career exploration, occupational choice (Chalk et al., 1994, 2005) and interpersonal relationships as possible selves (Anthis, Dunkel, & Anderson, 2004; Shepard & Marshall, 1999). Similarly, research conducted with young

adults indicated that their possible selves mainly involve education, career, family and success (Arnett, 2000; Hooker, 1992; Oyserman & Markus, 1990b; Oyserman & Fryberg, 2006; Rossiter, 2007).

Based on the assumption that possible selves are domain specific, Oyserman and colleagues developed a coding scheme that is used to classify the various possible selves that adolescents generate (Oyserman et al., 1995, 2004; Oyserman & Markus, 1990a; Oyserman & Saltz, 1993; Unemori et al., 2004). The coding system consists of six content domains which have been widely applied in studying adolescents' positive and feared possible selves (Hooker, 1999; Oyserman, Gant & Ager, 1995; 2004; Oyserman & Markus, 1990a, 1990b; Oyserman & Saltz, 1993; Robinson et al., 2003; Unemori, et al., 2004).

The first content domain, namely *academic achievement* relates to school interactions, as well as academic or career-related achievement. An example would be "becoming a lawyer" as a positive possible self and mentioning "being unemployed" as a negative possible self. As a domain, school plays a central role for adolescents and success in school is the essential bridge between childhood and adulthood (Oyserman et al., 2004). The second content domain refers to *interpersonal relationships* which relates to family, friends or any other social relations. An example of a positive possible self would be "becoming a good husband/wife" and an example of a feared possible self would be "being divorced". The third content domain refers to *personality traits* which point to unique self-descriptions such as "becoming kind" as a positive possible self and "becoming unfair" as a feared possible self. The fourth content domain addresses *physical/health related issues* such as physical and weight issues. An example for a positive possible self would be "being sporty" and for a feared possible self "being obese". The fifth content domain refers to *material and lifestyle issues* which include material possessions as well as living arrangements. An example of a positive possible self in this category would be "I am going

to live in a mansion” and an example of a feared possible self would be “being poor”. The sixth content domain refers to mentioning any *non-normative* or rather, *negative possible selves*. An example may be, “becoming an addict” or “being in trouble with the police”, and even “having no expectations for the future” (Sica, 2009, p. 237). The content domain *academic achievement* might represent both the individual and/or the collective as self-representation. The content domains *personality traits*, *physical/health and material/lifestyle* represent mainly the individual self, whereas the content domains *interpersonal relationship* represents predominantly the relational self (Markus & Nurius, 1986; Brewer & Gardner, 1996).

Shepard and Marshall (1999) conducted interviews to ascertain the relevance of the possible selves’ concept and to identify the domains that are most relevant in the age group of adolescents. The study found that young adolescents had no difficulty picturing themselves in the future. Moreover, it was found that they generated more positive possible selves than negative possible selves (Cross & Markus, 1991; Shepard & Marshall, 1999). The domains that emerged from the interviews included: education/training, health, leisure, lifestyle, occupation, possessions, relationships and safety. The most frequently mentioned possible selves were in the occupational domain, which refers to academic achievement according to the coding system of Oyserman and colleagues (Oyserman & Markus, 1990a; Oyserman et al., 2004). Moreover, the careers listed by the participants were mostly gender-relevant as well as informed by the community in which these young people lived (e.g., blacksmith and farmer).

The second most frequently mentioned possible selves according to the coding system of Oyserman and colleagues (2004) referred to the interpersonal relationship domain (Shepard & Marshall, 1999). The interpersonal relationship domain was found to be salient for adolescents because this period pertains to interpersonal functioning

especially, family and peer relations. During this time it becomes very important for adolescents how they are perceived by others (Cross & Markus, 1991; Knox, Funk, Elliott & Bush, 1998; Shepard & Marshall, 1999; Oyserman & Fryberg, 2006). Hoped-for relationships were family-oriented, and the feared possible selves in this domain were about losing a relationship. There were some gender differences with girls mentioning more often feared possible selves which included a fear of losing their family. Boys, on the other hand, mentioned more often material/lifestyle domains, for instance positive possible selves such as owning a car and feared-selves such as the fear of losing a home or being poor. These findings showed that young people connect the possible selves' concept to their daily lives; that is, exploring the link between self-concept and the future self one would like to become (Shepard & Marshall, 1999).

Based on the outlined research, the first aim of the present research had two objectives. The first objective was to replicate the trend of previous findings (Anthis et al., 2004; Cross & Markus, 1991; Oyserman et al., 2002, 2006, 2007; Shepard & Marshall, 1999) by testing the hypothesis that possible selves reported by South African adolescent participants will mainly relate to academic achievement and interpersonal relationships when compared to the remaining domains (Hypothesis 1). Also in line with previous findings, the hypothesis was proposed that South African adolescent participants might find it easier to generate positive possible selves than negative possible selves (Hypothesis 2).

As mentioned before Markus' and Nurius' (1986) Theory of Possible Selves as well as related research further assume that possible selves should be balanced, that is to say, adolescents should report positive and negative possible selves from the same content domains.

## **Balanced possible selves for adolescents**

As mentioned before, the balance between expected and feared possible selves in a given domain provides an individual with more diverse motivational resources (Oyserman & Markus, 1990a). Studies that have been conducted to explore the relationship between possible selves and academic performance have shown that when adolescents are aware of impediments to their success, that is, having balanced possible selves, they are more likely to change their school-related behavioural strategies (Anderman, Anderman & Griesinger, 1999; Oyserman et al., 1995). Oyserman and Markus (1990a, 1990b) also showed that having balanced possible selves in adolescence leads to less delinquency. In their study Oyserman and Markus (1990a) categorised learners into four groups. The first group consisted of students from a local school, who had no known record of delinquency recorded with the police. The other three groups were drawn from samples of youth distinguished by their degree of involvement in delinquency, that is, from youth who had had contact with the police at least once to those who were at a state training school for learners with severe delinquency cases. Participants were asked to generate three expected, three hoped-for and three feared selves for the next year. Oyserman and Markus (1990a) examined the balance between expected and feared possible selves of delinquent and non-delinquent participants. They found that the delinquent participants were less likely to have balance between expected and feared possible selves. On describing their expected possible selves delinquent participants mentioned “being a junkie”, or “being alone” as possible selves, very few mentioned school-related activities. Their fears focused on being involved in crime and using drugs. On the other hand, the non-delinquent group generated achievement-related selves, expecting to do well in school, fearing failure or not getting along with others at school. In terms of balance, the delinquent group generated the least number of balanced pairs of possible selves. They feared becoming criminals but did not



generate expectations that focused on avoiding becoming their feared selves. The study found that when feared selves were paired with expected selves, individuals reported a vast array of motivational resources which might be activated to minimise the possibility of finding oneself involved in delinquent behaviour (Oyserman & Markus, 1990a).

Oyserman and Markus (1990b) concluded that for some individuals it is a lack of possible selves that allow an individual to be involved in delinquent behaviour, while for others, pursuing a particular possible self leads to delinquent behaviour. Adolescents unable to construct and maintain positive possible selves in the conventional domains of family, friends and school, are more likely to engage in delinquent behaviour as a means of gaining a certain identity, or entry into a particular social group (Oyserman & Markus, 1990a; Oyserman & Saltz; 1993).

In line with the outlined research, the second aim for the present research was to elaborate on whether South African adolescents generate balanced possible selves by testing the hypothesis that participants will generate balanced possible selves particularly with regard to the content domains that are assumed to be salient to them: academic achievement and interpersonal relationships (Hypothesis 3).

Having an image of the self in the future is not enough to ensure the attainment of the future self. It also requires strategies on how to conduct oneself to provide some sort of a roadmap which leads to the desired future self (Oyserman et al., 2004). The behavioural strategies that are employed by the adolescents are based on the temporal aspects in line with their development phase. In order for the strategies to influence behaviour, they should be specific and self-relevant (Hoyle & Sherrill, 2006).

## **Strategies of adolescents' possible selves**

In a study conducted by Oyserman et al. (2004) it was hypothesised that academic possible selves guide behaviour and produce the desired outcome over time, only when they are detailed and accompanied by strategies for action and for dealing with the social context (namely, school in this study) where the goal is to be achieved. Strategies for positive academic outcomes serve as a critical mechanism for sustaining positive emotions about school, positive behaviour and ultimately, better grades. The results demonstrated that students with a clear plan on how they were to achieve their positive academic possible selves performed much better academically than those without a plan. These students' academic outcomes improved their classroom participation, they spent more time doing their homework and there was no need for them to be referred to remedial classes when compared to their peers (Oyserman et al., 2004).

For expected selves to influence behaviour, they must be concrete and contain specific plans and strategies for goal achievement (Leondari, Syngollitou & Kiosseoglou, 1998; Yowell, 2002). These strategies are important as they prompt immediate action in an attempt to attain the future self. Without these strategies the school-focused self may feel too far in the future. Pupils, who could see a correlation between school and success in the future, were more likely to work harder and do their homework regularly (Oyserman, Johnson & James, 2011). Effective strategies include both one's own actions over time, and identifying ways to engage in these actions in the context within which they occur.

Possible selves serve as cognitive goals and allow an individual to "try" on different selves to check which future self they are prepared to work towards (Markus & Nurius, 1986, p. 954). A sense of self in the desired end state is constructed and the individual organises actions and is energised mentally in pursuit of the desired end state (Oyserman, 1990a). When an individual is aware of the negative self they want to avoid, they are better

equipped to employ strategies and track steps that help them avoid becoming their feared self (Oyserman & Markus, 1990a, 1990b; Oyserman, 2007). Strategies are important to keep an individual focused on the goal. Therefore it was hypothesised for the present study that participants with a balanced possible self are more likely to report strategies to either reach their positive possible selves or avoid the negative possible selves compared to participants without balanced possible selves (Hypothesis 4).

The Theory of Possible Selves further proposes that, as much as possible selves are individualised and/ or personalised they, however, mirror the self as “socially determined and constrained” (Markus & Nurius, 1986, p. 954). Consequently, previous research has also focused on social factors influencing possible selves.

### **Social Factors influencing Possible Selves**

According to Markus and Nurius (1986) possible selves contribute to the flexibility of the self because they are activated by different social situations and determine the nature of the working self-concept. They may be rooted in a person’s experience, past behaviour and also in what significant others believe the individual should become (Markus & Nurius, 1986). Three dominant social factors that have been identified to influence possible selves are race/ethnicity, gender and the school environment.

#### **Race and ethnicity**

An understanding of who one is mediates between values and actual behavior (Oyserman & Fryberg, 2006). Shared beliefs about what is important for a person and what is expected of this person are reflected through his/her membership in social groups such as racial/ethnic groups. Stereotypes about what is expected from one’s group and ingroup role models that come to mind are important for young people when imagining a possible self.

Burack, Irby, Carline, Ambrozy, Ellsbury and Stiller (1997) conducted a study on African-American medical students to determine how they choose which form of medicine to specialise in. It was found that role models influenced which area of specialisation students ultimately choose, especially if the role model did not represent negative stereotypes (Burack et al., 1997; Oyserman & Fryberg, 2006). Role models are likely to represent possible selves if they belong to the young person's in-group (Burack et al., 1997).

Studies have been conducted to examine racial/ethnic identities as factors in the choice of possible selves (Oyserman et al., 1995; Oyserman, Kemmelmeier, Fryberg, Brosh & Hart-Johnson, 2003). When young people think about what is possible for them, preformed ideas about what is possible and expected of their group become salient (Feliciano & Rumbaut, 2005; Oyserman & Fryberg, 2006). That is, people act in such a way that is congruent with their social identity and they always want to maintain the norms and standards of the social group important to them (Oyserman & Markus, 2006). Kao (2000) conducted a study to substantiate the argument that stereotypical images held about certain groups play a role in the choice of possible selves. The study was conducted at a racially heterogeneous school in the US. In as much as all the students are capable and can achieve high grades to become whatever they wish in the future, these aspirations are further impacted by the stereotypical images attached to their racial groups. Focus groups and interviews offered descriptions of how groups differed in their abilities and skills in various academic and non-academic arenas. The study showed that a clear and strong relationship existed between group images and the pattern of possible selves among racial groups. For instance, Hispanics mentioned feared possible selves of falling into the negative stereotype of unskilled manual labour. Blacks feared failure and wanted to avoid the stereotype of low academic abilities. Asians focused on meeting high expectations of

academic performance and educational attainment, that is, they feared disappointing parents and wanted to confirm expectations of others (Kao, 2000).

## **Gender**

Elmore and Oyserman's (2012) study found that school effort was considered worthwhile if it was gender-congruent. Gender is a core social identity; boys and girls are meant to act in a certain way, and they do things that are in line with the norms and values of their gender group. That is, when behaviour feels gender-congruent then effort is more likely. The study of Elmore and Oyserman (2012) found that when a difficult task was completed by others of the same gender group, then the difficulty was interpreted by the participants as a sign of the task's importance instead of saying the task was impossible.

Other studies have found that females think about significant others, their immediate relationships (Packard & Nguyen, 2003; Yowell, 2002) and they value social interactions (Badger, Craft & Jensen, 1998) when planning their careers. Females want to see role models in a specific career before they can see that it is a career that they can do (Coogen & Chen, 2007; Kerpelman, Shoffner & Ross-Griffin, 2002; Packard & Nguyen, 2003). They are even willing to change their initial possible selves if they believe their chosen careers take up too much time outside the home (Curry, Trew, Turner & Hunter, 1994; Packard & Nguyen, 2003). In contrast males have been found to formulate exaggerated, uniquely superior "I want to be a billionaire" possible selves (Knox, 2006).

## **The school environment**

Research has demonstrated that identities that make up children's possible selves focus mainly on their everyday contents, and a number of studies suggest that school, education and future occupations are a common focus for teen's possible selves (Knox et al., 2000; Oyserman & Fryberg, 2006; Shepard & Marshall, 1999), and that success in school forms a critical transition to adulthood (Oyserman et al., 1995; 2004). Important

relationships are formed at school; individuals learn how to get along with others and understand authority structures. With regards to school-related possible selves, an individual must be able to generate possible selves that individualise or gives personal meaning and substance to the future self. This individual must be able to envision him-/herself finishing school (Oyserman & Markus, 1990a; Oyserman et al., 2002). Research on possible selves that are based on the near future (e.g., next year) have shown that school-focused possible identities positively influence current behaviour such as doing homework, paying attention in class, and contain school focused behavioural strategies (Oyserman & Saltz, 1993; Oyserman et al, 2004, 2006; Smith, James, Varnum and Oyserman, 2014). Other studies have shown that youth with school-focused possible selves have higher levels of personal well-being (Cameron, 1999), are able to do well and get better grades (Oyserman et al., 1995), and are at a reduced risk of being involved in delinquent behaviour (Oyserman & Markus, 1990a, 1990b; Oyserman & Saltz, 1993).

Studies have been conducted on the influence that the type of school environment has on students' achievements and attitudes (Bedi & Garg, 2000; Eshetu, 2016; Kamwendo, 2010; Lee & Bryk, 1986; Newhouse & Beegle, 2005). For instance, Lee and Bryk (1986) compared single-sex (private schools) against co-educational (government) high schools. Enrolment at private schools is restricted, based on affordability and entrance exams leading to lower learner versus teacher ratios (Bedi & Garg, 2000; Kamwendo, 2010; Lee & Bryk, 1986). Private schools have better equipped laboratory and library facilities than government schools. The teaching methods employed in private schools are more learner-centred, there are tutorial classes available for the learners and parent involvement in learner matters is encouraged more (Eshetu, 2016). Learners from the private schools are often from more advantaged, two-parent homes, with parents having some form of higher (post-secondary) education. These learners in turn compete towards better academic

achievement, they are better able to continue their education, to attend college and ultimately end up in careers where they earn higher than their public (government) school counterparts (Eshetu, 2016; Lee & Bryk, 1986).

Although possible selves studies have been conducted in different school settings especially minority group schools and juvenile delinquency centres, these studies did not necessarily compare the different schools and how they influence the choice of possible selves (Oyserman & Fryberg, 2006; Oyserman & Markus, 1990a; Unemori et al., 2004). Instead these studies were aimed at equipping learners to work towards improving academic outcomes and reducing the risk of school failure linked to stereotypes (Oyserman & Fryberg, 2006).

The above outlined findings on social factors already suggest that possible selves do not occur in a social vacuum. Individuals see themselves as members and part of variously inclusive social categories within a particular society. To understand the impact of the social categories such as race/ethnicity, gender and school environment on possible selves, Hypotheses 1 to 4 will also be tested by controlling the impact of these three social categories.

Social categories such as race/ethnicity, gender and school environment are determinants and factors that can constrain an individual (Markus & Nurius, 1986, p. 954). However, these three main factors do not capture the complexity of the social context which influences individuals' experiences, emotions, motivations and decisions. Given the fact that the present research focused on South African adolescents known as "born frees", it was important to take their social context into consideration which is still influenced by the legacy of apartheid, that is to say, by social and spatial segregations according to racial and economic lines.

## **Inequality as Social Context**

South Africa is one of the most unequal societies in the world (De Jager et al., 2012; Leibbrandt et al., 2012). The distinction between poor and rich is still race related and can be described as a legacy of apartheid (HSRC, 1987). Apartheid, an Afrikaans word meaning “separateness” or the “state of being apart”, was a system of racial segregation that was enforced by the ruling National Party, from 1948 until 1994. During the apartheid era four main race groups were distinguished: black Africans, whites, coloureds and Indians (Finchilescu & Dawes, 1999; HSRC, 1987). Only whites as minority held most of the power as the dominant group within the apartheid regime.

Persistent inequality is a lived reality for the majority of South Africans (Durrheim, Mtose & Brown, 2011). If a child comes from a poor background s/he is likely to wake up in a tiny house with no electricity or running water. S/he has to travel long distances to get to school. From most of the informal settlements it takes these students about an hour to travel by bus to get to the nearest school. The government has made arrangements for these students to get food at school. For most of them these meals are all they have for the day. On the other hand, a child from a richer South African family is likely to get up from his/her own bed, having had breakfast and a warm shower/bath. The parents have a car or two in the household. They are able to take their child to school which is very often a mere 5 minutes’ drive from home.

One of the most important components re-enforcing the cycle of inequality is the difference in school quality. The South African school system is stratified along the lines of race, socio-economic status and geographic location (Yamauchi, 2004). The township schools are poorly equipped and are mainly attended by black students. Private schools, which are mostly attended by white and black students from relatively wealthy families, have state-of-the-art equipment and the best qualified teachers. The second component



reinforcing the cycle of inequality is the high unemployment rate especially among black young people. Although some individuals have been able to move out of poverty, there are still many more people who remain poor. According to the 2015 Quarterly labour force survey published by Statistics South Africa, the national unemployment rate stands at 24.5% (Statistics South Africa, 2015).

This experienced reality of inequality can be assumed to influence the choice of possible selves among adolescents. This influence can be twofold: On the one hand, it might be that adolescents from a low socio-economic background choose possible selves to move out of poverty, whereas adolescents from a high socio-economic background choose possible selves to maintain their middle-or upper class lifestyle. On the other hand, it might be that adolescents choose possible selves that change the existing inequality between the groups. To understand the relationship between experience of inequality and choice of possible selves the Justice Model of Inequality as developed by Jasso (2007) and the Social Dominance Theory (Sidanius & Pratto, 1999) were applied to theoretically conceptualise this relationship.

### **Inequality from the perspective of the Justice Model**

Distributive justice refers to the distribution of resources across societies (Tyler, 2011). In studying distributive justice, Jasso (2007) distinguished two actors: *the observer* and the *rewardee*. She further proposed three fundamental quantities. First, the observer's assumption of the rewardee's *actual reward*, secondly, the observer's idea about what would be a *just reward* for the rewardee, and thirdly the observer's *justice evaluation* which means his/her assessment of the fairness or unfairness of the actual reward. According to Jasso (2007), the rewardee and the observer may be the same person or they may be two different people. The actual reward is also sometimes called the perceived-actual reward, because the observer's information about the rewardee's actual reward may not be precise.

The perceived-actual reward is compared to the just reward to assess distributive justice.

To understand the observer's assessment of distributive justice, it is important to understand the observer's ideas about the rewardee's actual and just rewards. Several research designs have been developed to measure and estimate the three quantities relevant in studying distributive justice.

Schneider (2012) conducted a study based on Jasso's (2007) approach on the relationship between perceptions of inequality (i.e., perceived actual reward), preferences for inequality (i.e., just reward) and life satisfaction. Her findings showed that participants with higher income and higher educational levels did not only perceive but also preferred greater inequality. These results were particularly found in older and male participants, who perceived and preferred inequality more than younger and female participants. Moreover, participants from lower income groups perceived less difference in the inequality levels within society. This perception is assumed to act as some form of cognitive buffer, protecting these individuals psychologically from existing status differences (Schneider, 2012, p. 436). Schneider's (2012) findings suggest that individuals from high income groups, i.e., those who already have most of the resources, not only perceive but also prefer inequality which they might perceive as legitimate. Therefore, they might feel less guilty about having more resources, or might feel less responsible for inequality. The preference or rather, the support for inequality between groups corresponds with the concept of social dominance orientation as conceptualised by the Social Dominance Theory (Sidanius & Pratto, 1999).

### **Inequality from the perspective of Social Dominance Theory**

Social Dominance Theory (Sidanius & Pratto, 1999) aims to understand *why* human societies tend to be unequal. The theory integrates several levels of analysis; namely, the manner in which individuals are predisposed psychologically as well as the cultural

ideologies and policies that a person endorses. It also explores the relations between people in the same group and those from the out-group; as well as, how all these forces jointly contribute to the production, maintenance and reproduction of social inequality (Sidanius Pratto, van Laar & Levin, 2004).

Social Dominance Theory argues that societies, which produce economic surplus in terms of resources that can be distributed for consumption amongst its inhabitants, are organized into group-based hierarchy (Pratto, Sidanius & Levin, 2006). Three main systems are evident in these societies, namely; 1) the *age system*, where adults have a disproportionate power over children, 2) a *gender system*, where men have more power (be it social, political, military power) than females, and 3) an *arbitrary-set system*, a social system which offers access to positive social resources (including wealth, healthcare, legal rights and status) to members of the dominant group (Pratto, Stallworth, Sidanius & Siers, 1997). This leads to the sub-ordinate group being disproportionately left with negative social resources which include toxic waste, prison terms and stigmatisation (Pratto, Sidanius & Levin, 2006, Pratto et al., 1979). The theory suggests that at a societal level, the degree of group-based hierarchy is affected and in turn affects two mutually antagonistic sets of forces: hierarchy-enhancing and hierarchy-attenuating legitimising ideologies, on the one hand; and hierarchy-enhancing and hierarchy-attenuating social institutions, on the other.

Hierarchy-enhancing ideologies rationalise the establishment and maintenance of group-based social inequality, whereas on the other hand, hierarchy-attenuating ideologies oppose this. The degree of balance of these opposing ideologies remains stable just as much as the degree of social inequality remains stable over time (Sidanius & Pratto, 2011). Hierarchy-enhancing and hierarchy-attenuating social institutions also produce levels of inequality at a societal level. Hierarchy-enhancing institutions allocate resources to

advantage the dominant group to the disadvantage of the sub-ordinate group, and hierarchy-attenuating institutions have the opposite effect. Examples of hierarchy-enhancing social institutions include the military and criminal justice system. Hierarchy-attenuating institutions include charities, human and civil rights organizations (Pratto et al., 2006). In an attempt to explain how societies reach consensus on a legitimate degree of inequality, Social Dominance Theory introduced the concept of social dominance orientation (SDO). This is an individual-difference variable that predicts whether a person supports or rejects inequality (Pratto, Sidanius, Stallworth & Malle, 1994, p. 742) and thus hierarchy-enhancing or hierarchy-attenuating legitimising ideologies, and hierarchy-enhancing or hierarchy-attenuating social institutions with their related professional careers.

SDO is considered to be an individual's attitude toward intergroup relations. It is defined as, "the degree to which individuals desire and support group-based hierarchies, that is the domination of a sub-ordinate group by a superior group" (Sidanius & Pratto, 1999, p. 48). SDO is the extent of group distinctions in a specific context. Group distinctions include, but are not only limited to race, gender, religions, nationalities and social classes. The role of SDO over the nature and intensity of group-based social hierarchy is not only through its influence on legitimising ideologies and myths, but mainly because it has an influence on hierarchy-enhancing and hierarchy-attenuating policies (Sidanius & Pratto, 1999, p. 49).

Sidanius and Pratto (1999) identified four factors that influence social dominance orientation. First, SDO is driven by an individual's affiliation, that is, the manner in which an individual identifies him/herself and their membership roles in a hierarchically organised arbitrary-set group. This would mean that individuals from the dominant group, or those who identify strongly with the dominant group, will have higher levels of SDO than those from the sub-ordinate group. Secondly, an individual's background and socialisation also

play a role in one's level of SDO. This includes one's level of education, religion or faith and other social factors that surround the individual. The third factor includes people's temperaments and personality traits. For example, people who are highly empathetic are more likely to be less prejudiced and discriminatory against outgroups and would, therefore, have low SDO levels (Pratto, Sidanius & Stallworth, 1994). The fourth factor is gender. Males have been found to have high levels of SDO compared to females (Pratto et al., 1994). Various studies have shown the positive relationship between SDO and hierarchy-enhancing ideologies/ hierarchy-enhancing social institutions and the negative relationship between SDO and hierarchy-attenuating ideologies/hierarchy-attenuating social institutions (Pratto et al., 1994, 1997; Sidanius & Pratto, 2001; Sidanius, et al., 2004).

From the premise that young people connect possible selves to their daily lives it can be assumed that possible selves stand in a functional relationship to the young people's perceptions, experiences and preferences for social inequality. The interplay between perceived and preferred inequality (Jasso, 2007) and possible selves corresponds to the relationship between social dominance orientation (that is the support of inequality) and the choice of either hierarchy-enhancing or hierarchy-attenuating careers (Pratto et al., 1997; Sidanius, Pratto, Martin & Stallworth, 1991).

Hierarchy-enhancing careers are seen to be of status, prestige and high income. They are also seen as careers within organisations that aid the dominant group, that is to say, hierarchy-enhancing institutions. Careers within hierarchy-enhancing institutions include business management, finance, law, police officer, or prison warden (Pratto et al., 1997). Hierarchy-attenuating careers, on the other hand, are seen to be of less status, prestige and less income. These careers are associated with organisations that support subordinate groups, that is to say, hierarchy-attenuating institutions. Careers within hierarchy-attenuating institutions include social work, counselling, education, nursing and health care

(Pratto et al., 1997). There are also careers within organisations that are neither strongly enhancing nor attenuating. These careers are known as middlers and include professions in manufacturing, sales, training, science, art, architecture and animal husbandry (Pratto et al., 1997, p.40).

Based on research related to the preference for inequality (Jasso, 2007; Schneider, 2012) and the relationship between social dominance orientation (as support for inequality) and the choice of careers, the following hypothesis was proposed: Participants with a preference for equality are more likely to choose hierarchy-attenuating careers (that is to say, possible selves within the academic achievement domain) that are aimed at reducing inequality; whereas participants with a preference for inequality are more likely to choose hierarchy-enhancing careers (i.e., possible selves within the academic achievement domain) that are aimed at maintaining inequality. Also in line with previous research it is assumed to find the former particularly in participants belonging to sub-ordinate groups (i.e., low income groups) and the latter in participants belonging to dominant groups (i.e., high income groups) (Hypothesis 5).

As stated before, possible selves do not exist in a social vacuum but are informed by the social context. However, social context does not only refer to the presently experienced social context but also the social context people envision for the future. Consequently, the interplay between the adolescents' ideas about the future of their society and their possible selves was studied too. Perceptions of the future of society were assessed in the present study using the *Collective Futures Framework* (Bain, Hornsey, Bongiorno, Kashima & Crimston, 2013). According to the collective future framework, which is based on the concept of collective futures and the concept of perceived collective continuity, people think about how their society will change in the future, and these projections relate to

present day attitudes and behaviours that would promote or prevent this future society from occurring (Bain et al., 2013, p. 524).

### **Concept of Collective Futures**

William James (1890/1950) placed the time perspective at the core of personal development, by stating that an individual understands him/ herself as a unit across time. His work has led to a number of research studies which focused on the perception of self-continuity (Oyserman & Fryberg, 2006; Oyserman, Elmore & Smith, 2012; Bain, et al., 2013). Inner, personal well-being is not the only aspect of the self that is temporally extended; members of groups also see themselves as entities that move across time (Sani, Bowe, Herrera, Manna, Cossa, Miao, & Zhou, 2007).

It has been established that members of particular groups consider the groups' future, and that images of a society's future are important for social change (Reicher & Hopkins, 2001; Sani, Bowe, & Herrera, 2008). Chomsky (1999) expressed that, "Social action must be animated by vision of the future society, and by explicit judgements of value concerning the character of this future society" (p. 100). The Canadian philosopher Charles Taylor stated that "in order to have a sense of who we are, we have to have a sense of how we have become and of where we are going" (Taylor, 1989, p. 100). That is to say, in an attempt to reinforce our identity and to have a meaningful life, we need to perceive the groups to which we belong as having continuity through time (Sani et al., 2007).

In as much as people imagine a personal future, they also have visions of a society that they would like to be part of in the future (Bain et al., 2013). Images of the collective future are crucial for the functioning of a society because such images influence people's current actions (Bain et al., 2013; Hicks & Holden, 1995; Stevenson, 2006).

## **Perceived collective continuity**

To explain how people think about the future of the group that they identify with, Sani et al. (Sani, Bowe & Herrera, 2008; Sani et al., 2007) introduced the *perceived collective continuity construct*. Individuals who perceive collective continuity display stronger emotional attachment to their group (Sani et al., 2007). In recent work, Sani et al. (2008) studied the social psychological dimensions of perceived collective continuity (PCC). Two independent but related dimensions form part of the perceived collective continuity construct. The first dimension is made up of core values, beliefs, habits, traditions and mentalities that are transmitted throughout the group's generations and the second dimension is related to the perception that different stages and events that occur in a group's history are linked to one another to form the group's narrative (Sani, et al., 2007). The perceived collective continuity perceptions, as described above, correspond with the dimensions within individual continuity (Chandler, Lalonde, Sokol, & Hallett, 2003; Chandler & Proulx, 2008) which refers to our sense of personal self and is grounded on two perceptions. The first perception is that the self remains the same through the test of time, that is, despite physical and psychological changes that people encounter, they still have a deep inherent sense of their self. The second perception is that although the self is fluid and ever changing, due to the different phases that one goes through; these phases are interconnected during a person's lifespan and continue to form a life story (Sani et al. 2008). In line with the idea that perceptions of personal continuity foster personal well-being, Sani et al. (2008) proposed that people who perceive higher collective continuity would have higher levels of social well-being (SWB). The results of their study confirmed that just as much as individual continuity improves subjective well-being, perceived collective continuity enhances social well-being (Sani et al., 2008).



Group continuity gives people a sense of immortality, that is, as part of the group, their membership continues to exist even after the self, as a mortal being, ceases to exist (Reicher, 2008; Smeekes & Verkuyten, 2014). Sani et al. (2008) demonstrated that death awareness leads people to invest in their social groups as a means of decreasing their anxiety. In order to defend themselves from the psychological salience of their own mortality, people enhance the perceived continuity through time of the in-group, which in turn increases their group identification. This is because the ability to transcend individual existence makes group identification a suitable defence against a person's own finite existence (Sani et al., 2008, p. 9). Groups that are seen to be temporally enduring offer individuals a sense of collective continuity and therefore an attachment to the group (Sani et al., 2007). Social processes projected into the "foreseeable" future play an important role in motivating present behaviour (Combs, 2015, p. 3).

### **Collective futures framework**

The framework for understanding how individuals view projections of their societies' future and their relation to present day attitudes and actions, is termed, Collective Futures (Bain et al., 2013). Projections of the future are critical measures of a society's inner well-being, that is, they reflect concerns that individuals are currently faced with and thus influence people's current actions (Hicks & Holden, 1995). Collective futures are influenced by collective beliefs shared by members of a society; their contents reflect concerns shared by members of a society with regard to life within a social framework (Bain et al., 2013, Bar-Tal, 2000).

Bain et al.'s (2013) study aimed to demonstrate the interplay between how people think society will change in the future and their current attitudes and behaviours. The collective futures framework distinguishes two main types of projections about a society's future (Milfont Bain, Souza, Gouveia, & Kashima, 2014). The first type relates to broad

societal changes (that is, societal development and societal dysfunction) and the second type relates to changes in people's characters (these include people's traits and values). For instance, in the Bain et al. (2013) studies participants were asked to envisage whether society in 50 years' time would improve or deteriorate in terms of crime, disease, scientific progress, education, community building and scientific/technological developments. Another set of questions related to personal dimensions asked participants to rate whether people would be higher or lower in warmth, competence and morality (personal traits); or whether the following values, namely, self-transcendence, self-enhancement, conservation and openness to change, would be more or less typical in the future compared to present time.

The Bain et al. (2013) studies showed that individuals think about the future, and make projections about how the future would be different from today. The study also showed that participants' expectations of the future influenced their current attitudes and behaviour (Bain et al., 2013; Milfont et al., 2014). For instance, the anticipation of societal decay was more likely to result in present behavioural intentions than the anticipation of a society marked by scientific and technological advancement. Moreover, the studies further showed that projections about a future society motivated actions in the present when the future states were seen to be achievable and not just as fantasies (Bain et al., 2013, Milfont et al., 2014).

In planning their own individual futures, people indeed consider the future of society (Connel, Fien, Lee, Sykes, & Yencken, 1999). Studies on beliefs people share about the future of society have been conducted in different contexts. These include studies on beliefs about human extinction (Tonn, 2009; Leakey & Lewin, 1997); voter actions (Combs, 2015), ecologically sustainable futures (Hicks & Holden, 1995, 2007), climate change or global warming (Intergovernmental panel for climate change, 2001; Milfont et

al., 2014) and even videogame visions of the future (Abraham, 2015). However, most of these studies were conducted in the United Kingdom (UK) and Australia which represent rather stable societies. Not surprisingly, participants in these studies seemed to think that they have little control over their society's future, a future they see as controlled by science and technology (Hicks & Holden, 1995; Eckersley, 1997). In the UK study conducted with adolescents (aged 14-18), the respondents were fairly optimistic about their personal future yet pessimistic about the future they envisaged for their communities. They noted particularly concerns about poverty and unemployment, but could not see what they could do as active agents (Hicks & Holden, 1995, 2007).

Given the fact that the recent history of South Africa is characterised by severe social change experienced by the majority of South Africans, it was assumed that the anticipation of societal change is more closely linked to the choice of possible selves as it might be in stable societies. Thus the present research assumed that participants who perceive a collective future of societal development are more likely to report positive possible selves than negative possible selves, whilst participants who perceive a collective future of societal dysfunctionality are more likely to report negative possible selves than positive possible selves. Furthermore, it was assumed that the beliefs about societal development and dysfunctionality in the future of South Africa influence not only possible selves in general but also the career orientations of adolescents (Hypothesis 6).

## **THE STUDY**

A cross-sectional survey was conducted to test the following hypotheses:

*Hypothesis 1:* The majority of possible selves reported by South African adolescent participants will relate to academic achievement and interpersonal relationships.

*Hypothesis 2:* It was further hypothesised that participants would generate more positive possible selves than negative possible selves.

*Hypothesis 3:* It was hypothesised that participants will generate balanced possible selves particularly with regard to the content domains that are assumed to be salient to them: academic achievement and interpersonal relationship

*Hypothesis 4:* Participants with a balanced possible self are more likely to report strategies to either reach their positive possible selves or avoid the negative possible selves compared to participants without balanced possible selves.

*Hypothesis 5:* Participants with preference for equality are more likely to choose hierarchy-attenuating careers (that is to say, possible selves within the academic achievement domain) that are aimed at reducing inequality; whereas participants with preference for inequality are more likely to choose hierarchy-enhancing careers (i.e., possible selves within the academic achievement domain) that are aimed at maintaining inequality. It was further assumed to find the former particularly in participants belonging to sub-ordinate groups (i.e., low income groups) and the latter in participants belonging to dominant groups (i.e., high income groups).

*Hypothesis 6:* Participants who perceive a collective future of societal development should report more possible selves than negative possible selves, whilst participants who perceive a collective future of societal dysfunctionality should report more negative possible selves than positive possible selves. Furthermore, it is assumed that the beliefs of societal development and dysfunctionality in the future of South Africa influence the career orientations of adolescents.

## Participants

Six hundred and thirty-one ( $N = 631$ ) pupils from four high schools located in the Gauteng area, South Africa took part in the study. All four schools were public and gender-mixed schools. Three of the schools used English as the medium of instruction, whereas one school was an Afrikaans medium school. Two of the schools were located in townships within the Ekurhuleni South and Johannesburg East school districts (i.e., township school environment). These schools were mainly low economic status schools populated by black South Africans. Two schools were historically white schools and were made up of learners from different races. The two historically white schools were located in middle-class Tshwane suburbs (i.e., suburb school environment).

Participants were Grade 10 pupils with an average age of 16.77 years ranging from 15 to 21. The majority of the sample was females (341 compared to 274 male participants; 16 missings). Only a few participants did not answer the demographic questions, for instance, 11 participants did not answer the age question and 16 did not answer the gender question. The racial composition of participants was as follows: the majority of the participants indicated to be black, 67% ( $n = 423$ ), 22% reported to be white ( $n = 139$ ), 6.2% to be Coloureds ( $n = 39$ ) and 1.9% classified themselves as Indians ( $n = 12$ ). There were three participants who answered “Other” instead of choosing a racial group. According to the 2015 mid-year population estimates (the population is estimated at 54.96 million people) for South Africa by population group 80.5% blacks, 8.3% whites, 8.8% coloureds, 2.5% Indians, make up the total South African population (Statistics South Africa, 2015). Although the present study did not use a probability sampling technique the race distribution in the present sample represents quite well the race distribution on national level. With an understanding that blacks, coloureds and Indians all form part of the

previously disadvantaged group, they were summarized into the group of Blacks in the present study. Those who had selected “other” as a group were coded as missings.

In order to determine whether school environment, gender and race were independent from each other, three Chi-Square tests were conducted, testing the independency between school environment and gender,  $\chi^2 (1) = 0.429, p = .513$ ; between gender and race,  $\chi^2 (1) = 1.50, p = .220$ ; and between school environment and race,  $\chi^2 (1) = 198.789, p < .001$  (note that only two participants reported to be white and attending a township school). These results suggest that gender and school environment as well as gender and race were independent categories, whereas race and school environment were dependent. The latter is not surprising since township schools are hardly attended by white pupils.

Ethical clearance was granted from the University of South Africa, the Gauteng Department of Education (Reference number: D2014/206 G, Annexure A1) and the headmasters of the respective schools. The aim of the study was explained to the headmasters and the governing bodies of the respective schools. Parents were notified of the study at a joint meeting and consent letters were handed out. Parents who did not want their children to partake in the study returned the form and subsequently, these learners were exempted from the study.

## **Procedure**

The researcher with the assistance of two other colleagues visited the different schools that had agreed to partake in the study. In collaboration with the teachers responsible for Life Orientations subject a date and time suitable to each school's timetable, was identified. On the day of the study, pupils were arranged into classrooms and an hour was allocated for explanations, questions and the completion of the questionnaire.

Participants completed the questionnaire in their classrooms in the presence of one research assistant. The pupils were informed that the questionnaire consisted of a number of questions and statements that the pupils had to complete. The pupils were asked to answer the questions as honestly as possible. They were informed that there were no right or wrong answers and that they were to respond to every statement by ticking the most appropriate answer provided.

All ethical issues were conveyed to the pupils (anonymity, participation voluntary etc.). Participants were notified that once all the information had been collected from the research project, a lucky draw would be conducted. It was explained that only questionnaires that had been completely answered would be entered into the lucky draw. Each of the winners would receive a cell phone airtime voucher valued at R100 each. The learners were requested to fill in their cell phone numbers at the back of the script in order to participate in the lucky draw. The numbers that won were announced by the teacher at a later date. A month after the research study was conducted, two cell phone vouchers valued at R100 each, were presented per school.

## **Measurements**

The order of the measures presented below corresponds with the order of the measurements as applied in the questionnaires.

### **Collective future measurements**

*Collective futures* were assessed by making judgements on four basic dimensions including societal factors (societal dysfunction versus development), and people's character (traits versus values) as proposed by Bain et al. (2013). Participants were provided with items describing these dimensions and asked to indicate whether the characteristics describing society and/or people would be more or less common in South Africa in 50 years

when compared with South Africa today, using a 11-point scales (- 5 = much less common than in SA today, 0 = no different from SA today, and 5 = much more common than in SA today). (Note: the answer format was entered into the database as 1 = much less common than in SA today, to 6 = no different from SA today, and 11 = much more common than in SA today). Although all four dimensions were assessed, only the societal factors were relevant for the present study.

The dimension “Societal Development” which consisted of the items technological innovation, scientific progress, major scientific discoveries, volunteering, social welfare organizations, community groups, education standards and science education reached a Cronbach’s alpha of .78. The dimension “Societal Dysfunctionality” consisting of items such as murder, serious assault, disease, poverty, gender inequality, rape, homelessness, suicide, prostitution, corruption, burglary, fear of crime, forced immigration, gangs, terrorism, and global warming reached a Cronbach’s alpha of .92.

### **Inequality measurements**

*General income inequality* was assessed using the non-reflexive justice evaluation as developed by Jasso (2007) and applied by Castillo (2011) and Schneider (2012). Participants were first asked to estimate the average monthly income of high-status (chairman or managing director of a company) and low-status (unskilled manual worker in factory) careers (i.e., perceived income gap). Participants were asked to respond to the following two questions:

*What do you think a chairman or managing director of a large South African company earns per month on average?*

*How about an unskilled manual worker, such as a line worker in a South African factory? What do you think an unskilled manual worker earns per month on average?*



In a second step, participants were asked to estimate the just monthly income of high-status (chairman or managing director of a company) and low-status (unskilled manual worker in factory) careers (i.e., preferred income gap) by asking the following two questions:

*Now please tell us what do you think a just and fair average monthly income for a chairman or a managing director of a large South African company would be?*

*Tell us what you think is a just and fair average monthly income would be for an unskilled manual worker, such as a line worker in a South African factory?*

Based on the responses to these four questions we first calculated the perceived income gap and the preferred income gap using the following equations (1, 2):

$$\text{Perceived income gap} = \ln\left(\frac{\text{perceived income high status career}}{\text{perceived income low status career}}\right) \quad (1)$$

$$\text{Preferred income gap} = \ln\left(\frac{\text{preferred income high status career}}{\text{preferred income low status career}}\right) \quad (2)$$

If participants perceived/preferred an income gap between CEOs and workers, in that the CEO earns/should earn more than the worker, the value should be positive. If the value is zero participants do not perceive /prefer an income difference between CEOs and workers. However, if the value is negative participants perceive/prefer that workers earn more than CEOs.

We further calculated the *overall legitimacy of income inequality* (3) as ratios of perceived and preferred income gaps between CEOs and workers (Schneider, 2012):

$$\text{Legitimate inequality} = \ln\left(\frac{\text{perceived income high status career}/\text{perceived income low status career}}{\text{preferred income high status career}/\text{preferred income low status career}}\right) \quad (3)$$

If the value of legitimate inequality is close to zero, participants perceive either legitimate inequality (that means that the perceived and preferred gaps between CEO income and Worker income are equal) or legitimate equality (that means that the perceived and preferred gaps between CEO income and Worker income equals close to zero). Values

of legitimate inequality larger or smaller than zero indicate that participants perceive any inequality (either to the favour/disadvantage of the CEO or the worker) as illegitimate.

*Family income inequality* was assessed by comparing the ratios of perceived and preferred income gaps between Black and white families. Participants were first asked to estimate the average monthly income of Black families and white families by using the following two questions:

*What do you think is the average income of a Black South African family per month?*

*How about a white family? What do you think is the average income of a White South African family per month?*

In a second step, participants were asked to estimate the just monthly income of Black and white families using the following two questions:

*Now please tell us what do you think a just and fair average monthly income of a Black South African family would be per month?*

*Tell us what you think is a just and fair average monthly income would be for a white South African family per month?*

Based on the responses to these questions we calculated the perceived family income gap and the preferred family income gap using the following equations (4, 5):

$$\text{Perceived income gap} = \ln\left(\frac{\text{perceived income Black family}}{\text{perceived income white family}}\right) \quad (4)$$

$$\text{Preferred income gap} = \ln\left(\frac{\text{preferred income Black family}}{\text{preferred income white family}}\right) \quad (5)$$

If participants perceived/preferred an income gap between Black and white families, in that Black families earn/ should earn more than white families, the value should be positive. If the value is zero participants do not perceive/ prefer income differences

between Black and white families. However, if the value is negative participants perceived/preferred that white families should earn/earn more than black families.

We again calculated the *overall legitimacy of income inequality between Black and white families* (6) as ratios of perceived and preferred income inequality between Black and white families:

$$\text{Legitimate inequality} = \ln\left(\frac{\text{perceived income Black family}/\text{perceived income white family}}{\text{preferred income Black family}/\text{preferred income white family}}\right) \quad (6)$$

If the value of legitimate inequality is close to zero, participants perceive either legitimate inequality (that means that the perceived and preferred gaps between Black and white families are equal) or legitimate equality (that means that the perceived and preferred gaps between the incomes of Black and white families equals close to zero). Values of legitimate inequality larger or smaller than zero indicate that participants perceive any inequality (either to the favour/disadvantage of the Black or white family) as illegitimate.

### **Possible Selves**

*Possible selves* were assessed using the “possible selves questionnaire” as developed by Oyserman et al. (2004). Participants were provided with space to list four positive and four negative possible selves. Participants received the following instruction as per Oyserman et al. (2004, p. 146):

*“Now we would like to know what you want to be in the future. Each of us has some image or picture of what we will be like and what we want to avoid being like in the future, Think about the future — imagine what you will be like. In the lines below, write what you expect you will be like and what you expect to be doing in the future. In the space next to each expected goal, mark NO (X) if you are not currently working on or doing something towards achieving that expected goal; and mark YES (X) if you are currently working on or*

*doing something towards achieving that expected goal. For each expected goal that you marked YES, use the space to the right to write what you are doing to attain that goal.”*

Next, they were asked about their negative/ feared possible selves. The instruction read:

*“In addition to expectations and expected goals, we all have images or pictures of what we don’t want to be like; what we do not want to do, or want to avoid being. First, think a minute about ways you would NOT like to be in the future. Write those selves-to-be-avoided in the lines below. In the space next to each to-be-avoided self, mark NO (X) if you are not currently working on avoiding that to-be-avoided self; and mark YES(X) if you are currently doing something so this will not happen in the future. For each to-be-avoided self that you marked YES, use the space at the end of each line to write what you are doing to reduce the chances that this will describe you in the future.”*

Two independent raters coded all possible selves independently using the classification system and rater’s instructions as proposed by Oyserman and colleagues (2004; see Table 1).

Table 1. Classification and coding of possible selves (Oyserman et al., 2004)

Category	Positive Possible selves	Negative Possible selves
<i>Achievement:</i> relates to school and involves school interactions with teachers and school activities.	“get a university entrance”, “be successful”	“Not finishing School” and “Unemployment”

<i>Interpersonal relationships</i>	“Married” and “Good mother”	“Divorced” and “Being dependent on my parents”
involves family, friends, relationships and social interactions, except with teachers		
<i>Personality Traits</i> relates to	“Confident” and “Independent”	“selfish” and “ignorant”
personality characteristics and self-descriptions of traits.		
<i>Physical/Health Related</i> refers	“Thin” and “Athlete”	“being HIV-positive” and “being unhealthy and unfit”.
to physical health, weight and height.		
<i>Material/Lifestyles</i> relates to	“Living a better lifestyle than I am now” and “A car owner”.	“Being poor” and “living in poverty”
material possessions and living situation, including moving.		
<i>Non-normative/Negative</i>	Mentioning anything negative, for example “corrupt” mentioned as a positive possible self, or even having no expectations of the future.	“criminal” and “drugs and alcohol dependent”
include negative and illegal behaviours such as smoking, drinking, fighting, gangs, etc.		

During the coding process it appeared that there were instances where the raters’ codings of the possible selves did not correspond with each other. For instance where respondents would write “financially independent” as a positive possible self, the one rater coded this as an academic achievement while the other rater coded it as a personality trait.

Another example was where a participant wrote “older” as a negative possible self. The one

rater coded this as non-normative and the other rater coded it as physical/ health related issues. A last example is where participants used words such as “faggot” as negative/feared possible selves. One rater coded it as a personality trait while the other rater coded it as non-normative. Thus after testing the interrater reliabilities of the first two (positive and negative) possible selves which ranged from low though acceptable Cohen’s Kappa of .591 to .784 it became necessary to discuss the coding system again and to clarify the examples of the respective domains. As a consequence the interrater reliabilities improved ranging from very good (Cohen’s Kappa = .716) to excellent (Cohen’s Kappa = .834) according to Fleiss, Levin and Paik (2003). All ambiguous codings were discussed by the independent raters until agreement was reached. The results of the interrater reliabilities are reported in Table 2.

Table 2. Interrater reliabilities for the different possible selves

Mentioned possible selves	Positive Possible selves	Negative Possible selves
Possible self 1	<i>Kappa</i> = .591, <i>p</i> < .001	<i>Kappa</i> = .756, <i>p</i> < .001
Possible self 2	<i>Kappa</i> = .653, <i>p</i> < .001	<i>Kappa</i> = .784, <i>p</i> < .001
Possible self 3	<i>Kappa</i> = .793, <i>p</i> < .001	<i>Kappa</i> = .716, <i>p</i> < .001
Possible self 4	<i>Kappa</i> = .834, <i>p</i> < .001	<i>Kappa</i> = .719, <i>p</i> < .001

The codification of the possible selves provided raw data based on which the new variables *domain scores*, *positive versus negative possible selves*, *balanced possible selves* and *strategy scores* were created.

### ***Domain scores***

Variables were created to inform about the individual overall possible selves score for each domain (irrespective whether they were named as positive or negative possible

selves). For instance, a participant might have mentioned possible selves from the domain academic achievement as first positive possible self, third positive possible self and second negative possible self. The domain score for academic achievement (as variable) would be three (3) for this particular participant. This was done for all domains: academic achievement, interpersonal relationships, personality traits, physical/health related, material/lifestyles and non-normative/negative.

### ***Positive versus negative possible selves***

Variables for positive and negative possible selves were created by summarising all positive possible selves mentioned by participants and negative possible selves mentioned by participants irrespective of the domains.

### ***Balanced Possible Selves***

In the present study we defined “balanced possible selves” as participants’ positive and negative possible selves from the same domain irrespective of their order. The latter means that participants might have named a possible self from the domain academic achievement as first positive but as fourth negative. Participants were given scores indicating whether they named possible selves from the respective domains as positive only (score 1), as negative only (score 2) or as balanced (score 3).

### ***Strategy scores***

Strategy scores were created for achieving and avoiding the named possible selves by summarizing the mentioned strategies (frequency) for either the positive or negative possible selves.

### **Career orientations**

*Hierarchy-enhancing versus hierarchy-attenuating careers* were identified for the mentioned career exploration and occupational choice (Chalk et al., 1994, 2005) within the domain of academic achievement. Two independent raters coded the mentioned careers as hierarchy-enhancing, middlers, or hierarchy-attenuating using the classification system as proposed by Pratto et al. (1997). The coding system used is outlined in Table 3.



Table 3. Classification and coding for career orientations

Hierarchy Enhancing (HE)	Middlers (M)	Hierarchy attenuating (HA)
<p>Hierarchy Enhancing careers also known as the “power track” Any career that offers an individual the opportunity for the social expression of dominance – oriented values. Sidanius et al. (1991) found that students who chose careers in business and law had higher SDO scores than students from other fields of study.</p>	<p>Middlers are careers that neither enhance nor attenuate hierarchy.</p>	<p>Hierarchy attenuating careers, the “low power track”, are careers that would rather offset the effects of HE careers. These careers are associated with institutions that support or defend sub-ordinate groups.</p>
<p>Examples: law (criminal prosecutor), law enforcement (police officer), politics and business (business executive)</p>	<p>Examples: Manufacturing, science, art, training, architecture, sales</p>	<p>Examples: social work, counselling, nursing and healthcare, civil rights activist</p>
<p><i>HE careers benefits the interests of the wealthy, powerful and/or dominant group. These careers may sometimes be hostile towards the poor, powerless or vulnerable.</i></p>	<p><i>Middler careers neither enhance nor attenuate hierarchy</i></p>	<p><i>HA is about helping others, that is, careers that tend to be friendly towards or that benefit the poor, powerless and vulnerable.</i></p>

The coders were asked to ensure that the coding of *hierarchy-enhancing versus hierarchy-attenuating careers* was specifically from a society's point of view rather than from the individual's point of view. It was therefore necessary to discuss different careers in advance. For instance, "architecture/architect" as a career could be coded from an individual's point of view as hierarchy-enhancing career because one could climb up the corporate ladder. However, from society's point of view, "architecture/ architect" as a career does not necessarily contribute exclusively to the interests *of the wealthy, powerful and/or dominant group*. It was therefore decided to code "architecture/architect" as a middler career. The interrater reliability for careers mentioned as the first possible selves reached an excellent Cohen's Kappa of .92 ( $p < .001$ ). The codings of the second possible selves reached an inter-rater reliability of Cohen's Kappa = .96 ( $p < .001$ ). Remaining ambiguous responses were discussed until an agreement was reached.

## RESULTS

The results of the present study are presented in three sections. Section 1 reports on the results related to the hypotheses addressing possible selves. Section 2 focuses on the hypotheses addressing the relationship between career orientations (as special cases of possible selves) and inequality, whereas Section 3 informs about findings related to the interplay between possible selves and collective futures.

### Possible Selves

#### Preliminary analysis

The frequencies of the named possible selves within the respective domains are reported in Table 4. The overall frequencies indicated that the majority of participants

named academic achievement related possible selves not only as positive possible selves but also as negative/feared possible selves.

### **Hypotheses Testing**

Hypothesis 1 stated that the majority of positive and negative possible selves reported by South African adolescent participants will mainly relate to the domains of academic achievement and interpersonal relationships as shown in previous research (Anthis et al., 2004; Oyserman et al., 2002, 2006, 2007; Sheppard & Marshall, 1999).

The hypothesis was tested using repeated-measures ANOVA. Table 6 reports the domains' means and standard deviations for the whole sample and respective sub-samples. The factor tested in the repeated-measures ANOVA was *domain* which consisted of six levels: academic achievement, interpersonal relationships, personality trait, physical/health, material/life style and non-normative/negative. Repeated-measures ANOVA based on various assumptions which were tested and are reported in the following paragraphs.

The results for the overall sample revealed that the assumption of sphericity was violated according to the Mauchly' test,  $\chi^2(14) = 1269.43, p < .001$ . Therefore the Greenhouse-Geisser corrected tests are reported ( $\epsilon = .564$ ). The F statistics showed that there was a significant *domain* effect,  $F(2.82, 1728.79) = 391.91, p < .001, \eta_p^2 = .390$ , which means that the six domains differ from each other. Figure 1 depicts the estimated marginal means of the different domains.

Table 4. Frequency of possible selves

Positive possible selves				
	First named possible selves	Second named possible selves	Third named possible selves	Fourth named possible selves
	All	All	All	All
1 Academic achievement	489 (85.2%)	290 (68.4%)	180 (27.8%)	75 (52.8%)
2 Interpersonal relationships	13 (2.3%)	24 (5.7%)	22 (7.0%)	12 (8.5%)
3 Personality traits	35 (6.1%)	64 (15.1%)	76 (24.1%)	29 (20.4%)
4 Physical/ Health	9 (1.6%)	6 (1.4%)	9 (2.8%)	3 (2.1%)
5 Material/ Lifestyle	28 (4.9%)	40 (9.4%)	29 (9.2%)	20 (14.1%)
6 Non-normative/ negative	-	-	-	3 (2.1%)
Feared possible selves				

	First named possible selves	Second named possible selves	Third named possible selves	Fourth named possible selves
	All	All	All	All
1 Academic achievement	192 (34.8%)	122 (31.7%)	74 (28.8%)	26 (24.5%)
2 Interpersonal relationships	35 (6.4%)	19 (4.9%)	16 (6.2%)	9 (8.5%)
3 Personality traits	75 (13.6%)	75 (19.5%)	61 (23.7%)	27 (25.5%)
4 Physical/ Health	6 (1.1%)	8 (2.1%)	12 (4.7%)	5 (4.7%)
5 Material/ Lifestyle	94 (17.1%)	48 (12.5%)	26 (10.1)	11 (10.4%)
6 Non-normative/ negative	149 (27.0%)	113 (29.4%)	68 (26.5)	28 (26.4%)

Table 5. Means of the domain scores

	Domains					
	Academic achievement	Interpersonal relationships	Personality trait	Physical/Health	Material/Lifestyle	Non- normative/negative
All (n = 647)	M = 2.24, SD = 1.67	M = 0.23, SD = 0.56	M = 0.68, SD = 1.23	M = 0.09, SD = 0.38	M = 0.46, SD = 0.74	M = 0.56, SD = 0.86
Black sample (n = 477)	M = 2.43, SD = 1.69	M = 0.22, SD = 0.55	M = 0.70, SD = 1.26	M = 0.56, SD = 0.27	M = 0.39, SD = 0.69	M = 0.67, SD = 0.92
White sample (n = 139)	M = 1.99, SD = 1.42	M = 0.27, SD = 0.59	M = 0.76, SD = 1.19	M = 0.22, SD = 0.63	M = 0.76, SD = 0.86	M = 0.26, SD = 0.56
Independent samples t-test	t(614) = -2.76, p = .003	t(614) = .91, p = .364	t(614) = .50, p = .616	t(153.579) = 3.05, p < .01	t(192.321) = 4.64, p < .001	t(374.374) = -6.56, p < .001
Male (n = 274)	M = 2.18, SD = 1.66	M = 0.28, SD = 0.66	M = 0.59, SD = 1.16	M = 0.11, SD = 0.42	M = 0.51, SD = 0.77	M = 0.74 SD = 0.94

Female (n = 341)	M = 2.48, SD = 1.61	M = 0.19, SD = 0.47	M = 0.81, SD = 1.30	M = 0.08, SD = 0.36	M = 0.46, SD = 0.73	M = 0.45, SD = 0.78
Independent samples t-test	t(613) = -2.86, p = .023	t(474.534) = 1.80, p = .072	t(613) = -2.06, p = .040	t(613) = 1.08, p = .281	t(613) = .82, p = .415	t(531.486) = -4.04, p < .001
Surburb school (n = 147)	M = 2.68, SD = 1.75	M = 0.24, SD = 0.69	M = 0.80, SD = 1.39	M = 0.12, SD = 0.39	M = 0.47, SD = 0.72	M = 0.45, SD = 0.77
Township school (n = 330)	M = 2.32, SD = 1.65	M = 0.22, SD = 0.47	M = 0.66, SD = 1.19	M = 0.27, SD = 0.19	M = 0.35, SD = 0.67	M = 0.77, SD = 0.96
Independent samples t-test	t(475) = 2.18, p = .029	t(475) = .366, p = .714	t(475) = 1.16, p = .247	t(180.659) = 2.83, p = .005	t(475) = 1.63, p = .103	t(344.517) = -3.61, p < .001

Note: the sample for the school environment comparisons consisted only of Black participants

The post-hoc statistics based on the estimated marginal means using the Bonferroni correction revealed that the academic achievement score was significantly larger ( $p_s < .001$ ) when compared to the remaining domain scores (see Table 5 and Figure 1) which corresponds with Hypothesis 1 stating that the majority of reported positive and negative possible selves relate to the domain of academic achievement. The results further showed that the interpersonal relationships score was significantly larger than physical/health score ( $p < .001$ ) but significantly smaller than the remaining domain scores ( $p_s < .001$ ). These results do not support Hypothesis 1, which also stated that the majority of reported positive and negative possible selves relate to the domain of interpersonal relationships.

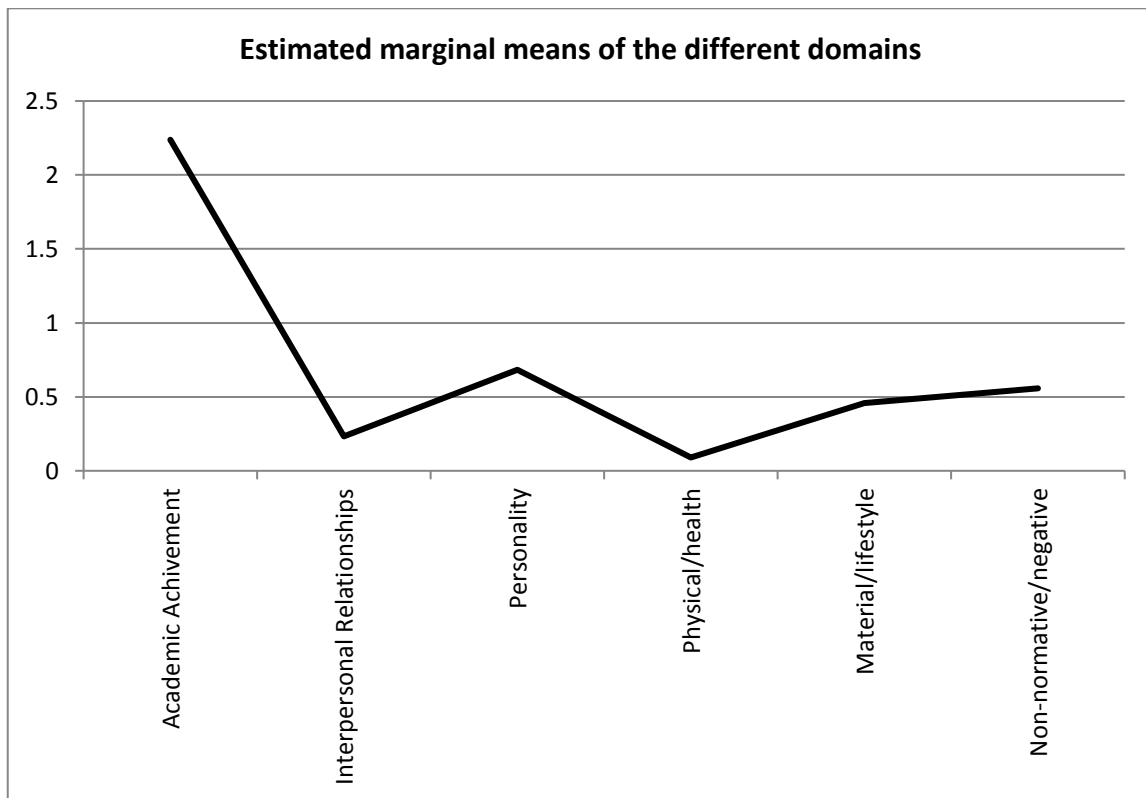


Figure 1. Estimated marginal means of the different domains



The comparisons of the remaining domains (see Figure 1 and Table 5) revealed that the score of the physical/health domain differed significantly from all domains ( $p_s < .001$ ), whereas the score of the non-normative/negative domain did not differ significantly from the score of the personality trait domain ( $p = .488$ ) and the score of the material/lifestyle domain ( $p = .386$ ).

For the overall sample it can be concluded that Hypothesis 1 was partially supported, because participants of this study reported significantly more possible selves related to the domain of *academic achievement* but not related to the domain of *interpersonal relationship* when compared to the remaining domains. The former is in line with previous findings showing that adolescents tend to report more possible selves related to academic achievement (Oyserman et al., 2002, 2006, 2007; Sheppard & Marshall, 1999). However, the latter did not support previous findings that possible selves related to interpersonal relationship are important to adolescents (Anthis et al., 2004).

In a second analysis gender, race and school environment were included as between-subject factors into the repeated-measures ANOVA. The results will be presented for each factor separately.

## **Gender**

Mauchly's test indicated for this model that the assumption for sphericity was violated,  $\chi^2(14) = 1185.62, p < .001$ . The Greenhouse-Geisser corrected tests was  $\epsilon = .564$  and the F statistics revealed that there was a significant *domain* effect,  $F(2.82, 1728.79) = 391.91, p < .001, \eta_p^2 = .390$ , which means that the domains differ from each other. A significant interaction between domain and gender,  $F(2.82, 1728.79) = 6.801, p < .001, \eta_p^2 = .011$ , was found, which suggests that males and females differ in their pattern of the domain scores. In other words, the lines of the groups are not parallel particularly with regard to the non-normative/ negative domain (see Figure 2). However, the between groups

test indicated that the variable gender was not significant,  $F(1, 613) = 0.09, p = .767, \eta_p^2 = .000$ , which means that the lines for the two groups are nevertheless close together (see Figure 2).

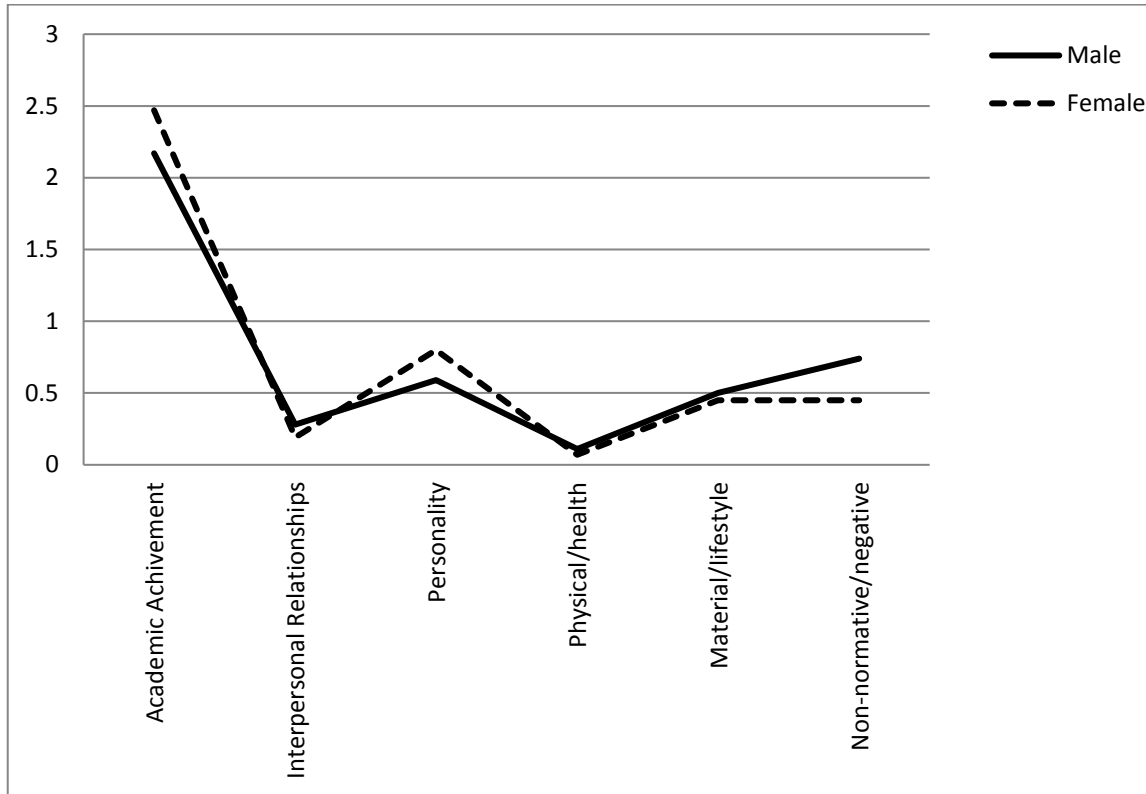


Figure 2. Estimates marginal means of the different domains for male and female participants

The post-hoc statistics using Bonferroni revealed the same pattern as reported for the whole sample in that first the academic achievement score was significantly larger ( $p_s < .001$ ) when compared to the remaining domain scores (see Table 5), secondly, the interpersonal relationships score was significantly larger than physical/health score ( $p < .001$ ) but significantly smaller than the remaining domain scores ( $p_s < .001$ ), thirdly, the score of the physical/health domain differed significantly from all domains ( $p_s < .001$ ), and

finally, the score of the non-normative/negative domain did not differ significantly from the score of the personality trait domain ( $p = 1.000$ ) and the score of the material/lifestyle domain ( $p = .265$ ).

## **Race**

Again, the Mauchly's test informed that the assumption for sphericity was violated,  $\chi^2(14) = 1230.76, p < .001$ . The Greenhouse-Geisser corrected tests was  $\epsilon = .562$  and the F statistics revealed that there was a significant *domain* effect,  $F(2.808, 1724.11) = 245.366, p < .001, \eta_p^2 = .286$ , which again means that the domains differ from each other. A significant interaction between domain and race,  $F(2.808, 1724.11) = 11.238, p < .001, \eta_p^2 = .018$ , was found, which suggests that black and white participants' lines connecting the domain scores are not parallel. The latter is however limited again to the non-normative/ negative domain (see Figure 3). The between groups test for race was not significant,  $F(1, 614) = 0.807, p = .369, \eta_p^2 = .001$ , which again means that the lines for the two groups are nevertheless close together (see Figure 3).

The post-hoc statistics using Bonferroni correction revealed that the academic achievement score was significantly larger ( $p_s < .001$ ) when compared to the remaining domain scores (see Table 5), secondly, the interpersonal relationships score was significantly larger than physical/health score ( $p < .05$ ) but significantly smaller than the remaining domain scores ( $p_s < .001$ ), thirdly, the score of the physical/health domain was significantly smaller than the other domain scores ( $p_s < .05$ ), and finally, the score of the material/lifestyle domain did not differ significantly from the score of the personality trait domain ( $p = .378$ ) and the score of the non-normative/negative domain ( $p = .580$ ).

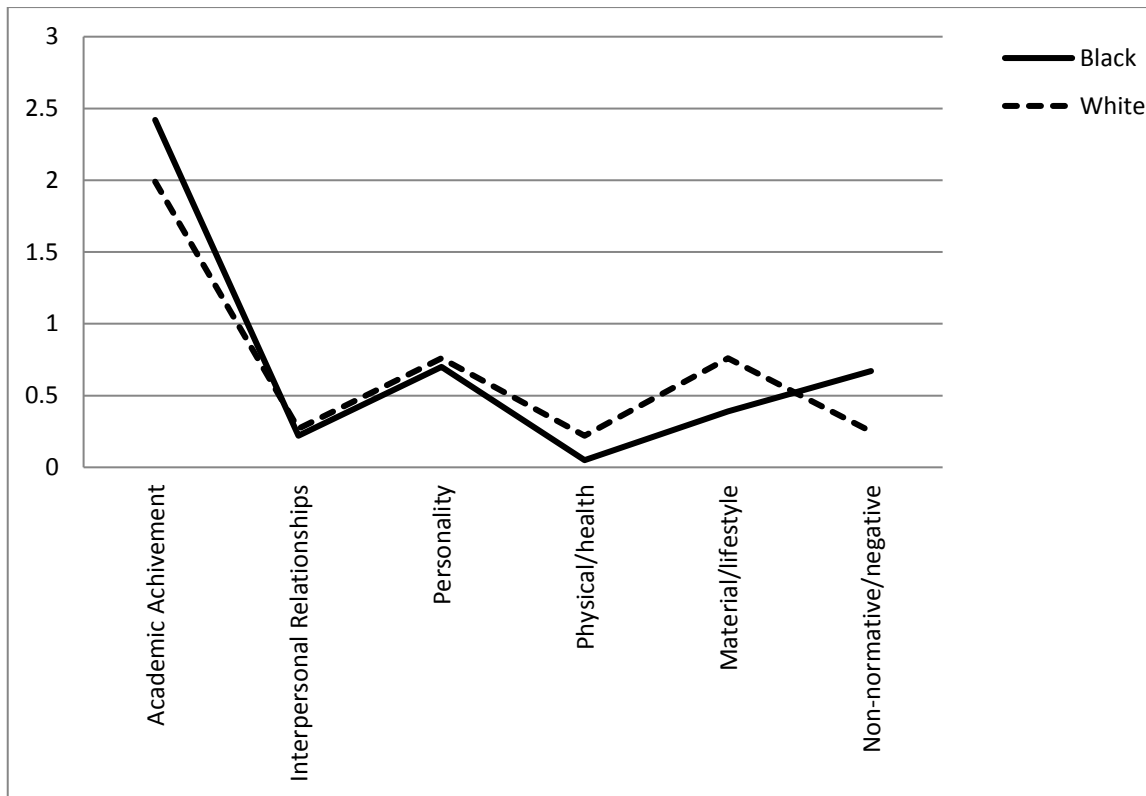


Figure 3. Estimated marginal means of the different domains for Black and white participants

### School environment

Given the fact that race and school environment were not independent from each other (see Section on Participants) it was decided to define school environment only for Black participants. Similar to the previous analyses, the Mauchly's test for this model suggested that the assumption for sphericity was violated,  $\chi^2(14) = 1081.977, p < .001$ , with a Greenhouse-Geisser corrected  $\mathcal{E}$  of .543. The F statistics revealed that there was a significant *domain* effect,  $F(2.714, 1289.242) = 311.308, p < .001, \eta_p^2 = .396$ , as well as a significant interaction between domain and race,  $F(2.714, 1289.242) = 5.023, p < .01, \eta_p^2 = .010$ . Moreover, the between groups test for school environment was not significant,  $F(1, 475) = 2.96, p = .086, \eta_p^2 = .006$ . Again these results indicate that the domains differ from

each other (i.e., domain effect), that township and suburb school participants' lines expressing the domains are not parallel with regard to the non-normative/negative domain (i.e., interaction), but that the lines for the two groups are nevertheless close together (see Figure 4).

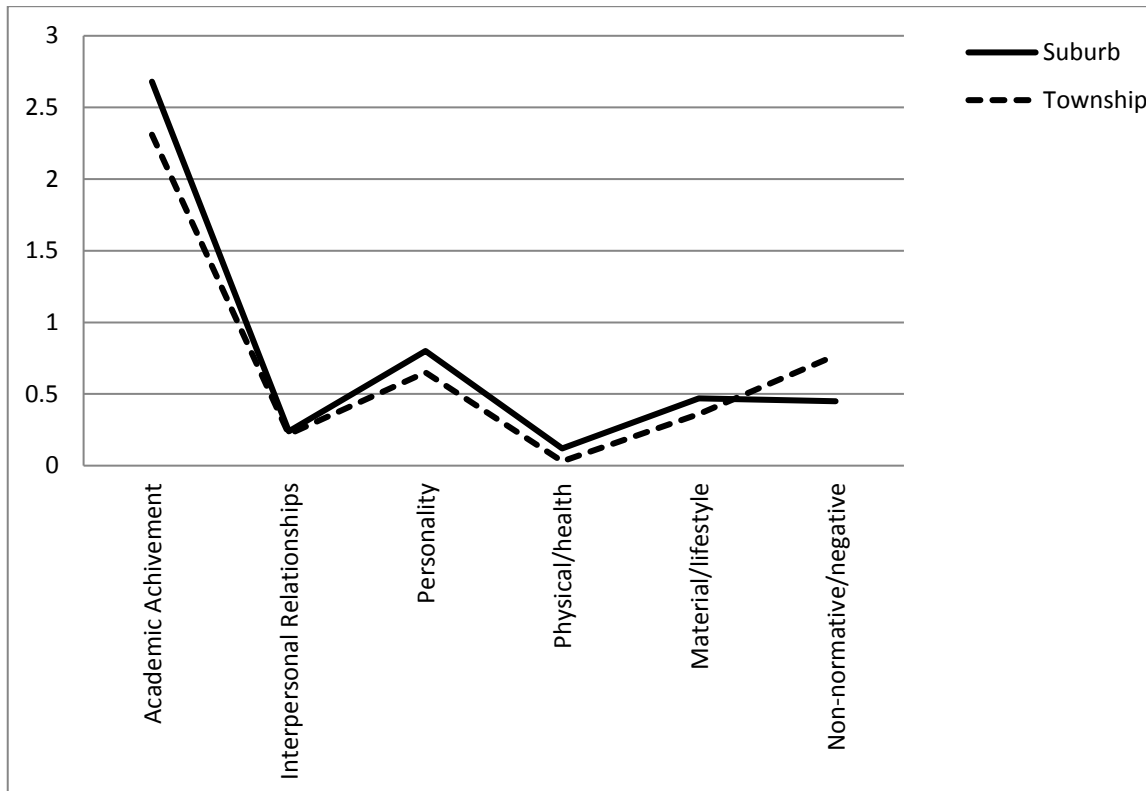


Figure 4. Estimated marginal means of the different domains for suburb and township school participants

The post-hoc statistics using Bonferroni correction showed that the academic achievement score was significantly larger ( $p_s < .001$ ) when compared to the remaining domain scores (see Table 5). Slightly different from the pattern as reported for the whole sample the results further showed that the score of the physical/health domain was significantly smaller than the other domain scores ( $p_s < .05$ ), that the score of the

material/lifestyle domain was significantly larger than the scores for interpersonal relationships and physical/health ( $p_s < .001$ ) but smaller than the remaining domains ( $p_s < .01$ ); and that the score of personality trait domain did not differ significantly from the score of the non-normative/negative domain ( $p = 1.000$ ).

In sum, the repeated-measures ANOVAs including gender, race and school environment as between-subject factors confirmed the findings of the overall sample in that participants reported significantly more possible selves related to the domain of *academic achievement* but not related to the domain of *interpersonal relationship* when compared to the remaining domains. The analyses further revealed interactions between domain and all between-subject factors which suggest that the groups' lines expressing the respective domains were not parallel particularly with regard to the domain non-normative/negative possible selves. However, the between group tests showed no significant differences between the gender, race and school environment groups. It is important to note that this test is based on the comparison of the average overall domain score and not on the average single domains scores. Consequently, various independent samples t-tests were conducted to determine whether gender-, race- and school environment-groups differ in their average single domains scores.

The results of the independent sample t-tests (see Table 5) indicated that Black participants scored significantly higher on academic achievement and non-normative/negative but significantly lower on physical/health and material/lifestyle when compared with white participants. Female participants scored significantly higher on academic achievement and personality traits but lower on non-normative/negative when compared to male participants. Lastly, suburb school participants scored significantly higher on academic achievement and physical/health but lower on non-normative/negative when compared to township school participants. Given the fact that school environment-

groups (suburb versus township) consisted only of Black participants the outlined racial differences with regard to the domains of academic achievement, physical/health and non-normative/negative can be assumed to be due to difference in school environment.

These findings suggest that possible selves related to the academic achievement domain are mainly salient for female participants and Black participants in a suburb school environment; whereas possible selves related to non-normative/negative domain are mainly salient for male participants and Black participants in a township school environment. Possible selves related to the material/lifestyle domain are more salient in white participants than Black participants.

It was further hypothesized (Hypothesis 2) that participants would generate more positive possible selves than negative possible selves. The results of the overall frequency support this assumption (see Table 4), given that participants reported more than twice the number of all named positive possible selves when compared to all named feared/negative possible selves. Again Hypothesis 2 was statistically tested using repeated-measures ANOVA by comparing participants' scores of positive and negative possible selves. The results revealed that they reported significantly more positive ( $M = 2.55$ ,  $SD = 1.11$ ,  $n = 544$ ) than negative possible selves ( $M = 2.35$ ,  $SD = 1.09$ ,  $n = 544$ ),  $F(1, 543) = 31.942$ ,  $p < .001$ .  $\eta_p^2 = .056$ .

Thus, Hypothesis 2 was supported by the present findings and supported the assumption that adolescents tend “to find it easier” to report positive possible selves than negative/feared possible selves (Cross & Markus, 1991, Robinson et al., 2003).

In a second analysis we tested Hypothesis 2 for the different domains of possible selves, respectively. Table 6 reports the means, standard deviations and sample sizes of positive and negative possible selves for the respective domains (see row “All”). The results of the repeated-measures ANOVAs comparing the positive and negative possible

selves means for domains with a sample size larger than 20 revealed that only academic achievement related positive and negative possible selves differed significantly,  $F(1, 286) = 127.082, p < .001, \eta_p^2 = 0.308$ , but not those related to personality trait and material/lifestyle,  $F_s(1, 76) < 1.35, p > .252, \eta_p^2 < .032$ . Given these results the findings for Hypothesis 2 can be specified in that adolescents tend “to find it easier” to report positive possible selves than negative/feared possible selves related to academic achievement.

In a third analysis we tested for group differences within the social categories of race, gender and school environment using independent samples t-tests (see Table 6). In as much as the results support Hypothesis 2 that adolescents find it easier to report positive possible selves than negative possible selves, the results indicated significant differences for the domain academic achievement especially for Black participants. Black participants reported significantly more positive possible selves related to academic achievement when compared to white participants. There were no differences between male and female as well as between suburb and township school participants. In sum, the overall results are in line with previous findings that adolescents find it easier to report positive than negative possible selves (Cross & Markus, 1991, Robinson, Davis, Meara, 2003). However, this trend was only found for possible selves related to academic achievement.



Table 6. Means, standard deviation and t-test statistics of possible selves for social factors

	Domains											
	Academic		Interpersonal		Personality trait		Physical/Health		Material/Lifestyle		Non-	
	achievement		relationships								normative/negative	
	positive	negative	positive	negative	positive	negative	positive	negative	positive	negative	positive	negative
	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)	M (SD, n)
All	2.12 (1.04, 287)	1.39 (0.68, 287)	1.13 (0.35, 15)*	1.20 (0.77, 15)*	1.64 (0.83, 77)	1.69 (0.79, 77)	1.22 (1.00, 9)*	0.44 (0.00, 9)*	1.18 (1.09, 43)	1.10 (0.31, 43)	1 (0.00, 1)*	2 (0.00, 1)*
Black sample	2.23 (1.07, 220)	1.42 (0.70, 220)			1.72 (0.82, 57)	1.75 (0.81, 57)			1.12 (0.43, 26)	1.04 (0.19, 26)		

White sample	1.76	1.30	1.40	1.50	1.29	1.18
	(0.84,	(0.61,	(0.82,	(0.76,	(0.47,	(0.39),
	66)	66)	20)	20)	17)	17)
Independent	(529) = -	(297) =	(137) =	(157) =	(94) = -	(159) =
samples t-test	4.86, p<	-1.43, p	-1.12, p	-1.69, p	0.55, p	0.67, p
	.001	= .153	= .265	= .092	= .587	= .501
Male	2.17	1.31	1.70	1.60	1.17	1.04
	(1.04,	(0.66,	(0.70,	(0.86,	(0.38,	(0.20,
	112)	112)	30)	30)	24)	24)
Female	2.09	1.45	1.61	1.76	1.21	1.16
	(1.04,	(0.69,	(0.91,	(0.76,	(0.53,	(0.37,
	175)	175)	46)	46)	19)	19)
Independent	(529) =	(298) =	(136) =	(156) =	(94) =	(160) =
samples t-test	0.61, p =	-1.54, p	0.48, p	-.59, p	0.32, p	- 0.85,
	.544	= .124	= .628	= .553	= .749	p = 395

Suburb school	2.16	1.57	1.78	1.78	1.30	1.00
	(1.06,	(0.79,	(0.74,	(0.79,	(0.67,	(0.00,
	77)	77)	23)	23)	10)	10)
Township	2.27	1.34	1.68	1.73	1.00	1.06
school	(1.07,	(0.64,	(0.88,	(0.83,	(0.00,	(0.25,
	143)	143)	34)	34)	16)	16)
Independent	(412) = -	(130.16)	(98) = -	(117) =	(59) = -	(101) =
samples t-test	0.466, p	= 2.25,	0.33, p	0.97, p	0.39, p	-1.18, p
	= .642	p = .026	= .744	= .335	= .697	= .240

Note: \* indicates sub-samples excluded from any analyses because of the small sample size

The third hypothesis addressed the balanced possible selves and stated that individuals acknowledge or are aware that there are both positive and negative aspects of the possible self within the same domain (Oyserman & Markus, 1990a, b). As mentioned in the measurements section participants were distinguished by whether they named only positive possible selves, only negative possible selves or whether they named “balanced possible selves” which was estimated as participants’ positive and negative possible selves from the same domain irrespective of their order. Table 7 informs about the distribution of participants who either named positive possible selves only, negative possible selves only or balanced possible selves within the respective domains.

Table 7. Distribution of positive only, negative only and balanced possible selves

	Positive only	Negative only	Balanced
Academic achievement	215 (45.5%)	13 (2.4%)	287 (52.2%)
Interpersonal relationship	45 (38.1%)	58 (49.2%)	15 (12.7%)
Personality traits	62 (27.9%)	83 (37.4%)	77 (34.7%)
Physical/Health	14 (34.1%)	18 (43.9%)	9 (22%)
Material/Lifestyle	54 (25%)	119 (55.1%)	43 (19.9%)
Non-normative/negative	2 (0.8%)	234 (98.7%)	1 (0.4%)

The descriptive results suggest that participants seem to focus on either the positive or negative aspects of the possible selves – except for the domain academic achievement where more than half of the sample showed balanced possible selves (see Table 7). The results further indicate a pattern worth to mention. First, academic achievement as possible

selves is more mentioned as positive than negative if not mentioned as “balanced”. This corresponds with the results of the repeated-measures ANOVA comparing the means of positive and negative possible selves for academic achievement as reported above. This suggests that participants who do not acknowledge that both positive and negative aspects of the possible selves exist seem to construe academic achievement as something positive to strive for.

Second, possible selves related to interpersonal relationship, personality traits, physical/health and material/lifestyle were reported by the majority as negative possible selves only. This trend suggests that possible selves from these domains are mainly construed as something that participants either fear or aim to avoid. Lastly, possible selves from the non-normative/negative domain were mainly reported as negative possible selves which suggests that participants of the present study conform to existing social norms in that they do not aspire non-normative possible selves (as positive possible selves) as found in the delinquent study (Oyserman & Markus, 1990a).

In sum, Hypothesis 3 could only be confirmed for the domain academic achievement. More than half of the participants mentioned balanced possible selves in this domain, whereas for the other domains (i.e., interpersonal relationship, personality trait, physical/health, material/lifestyle), the majority of participants mentioned these as negative to be avoided possible selves. Almost all (98.7%) of the participants mentioned non-normative/ negative possible selves as negative to be avoided possible selves.

Hypothesis 4 stated that participants who have balanced possible selves are more likely to report strategies to reach their positive possible selves or to avoid the negative possible selves compared to participants without balanced possible selves. We tested this hypothesis first by comparing the individual frequency of named strategies (i.e., strategy scores) to achieve their possible selves between participants who reported positive possible

selves only and participants who reported balanced possible selves. Table 8 reports the means and standard deviations.

The results of independent samples t-tests revealed significant mean differences for the domain academic achievement,  $t(513) = -1.98, p = .048$ , and marginally significant differences for the domain personality trait,  $t(136) = -1.79, p = .076$ , supporting the hypothesis that participants with balanced possible selves are more likely to have strategies in place to reach their positive possible selves compared to participants with no balanced possible selves. No significant mean differences were found for the domains of personality traits, physical/health and material/lifestyle,  $t_s(90, 19) < 0.769, p < .05$ .

Table 8. Means and standard deviations of the strategy scores to achieve the positive possible selves for participants who reported their possible selves (according to domains) as only positive or as balanced

	Positive only	Balanced
Academic achievement	M = 2.02 SD = 1.00 (n=238)	M = 2.19 SD = 1.02 (n=277)
Interpersonal relationship	M = 2.32 SD = 0.91 (n=44)	M = 2.26 SD = 0.99 (n=14)
Personality traits	M = 2.45 SD = 1.03 (n=62)	M = 2.75 SD = 0.92 (n=76)
Physical/Health	M = 2.84 SD = 0.89 (n=13)	M = 2.87 SD = 0.64 (n=8)
Material/Lifestyle	M = 2.78 SD = 0.90 (n=51)	M = 2.63 SD = 0.97 (n=41)

Secondly, the individual frequency of named strategies (i.e., strategy scores) to avoid their negative possible selves were compared between participants who reported negative possible selves only and participants who reported balanced possible selves. Table 9 reports the means and standard deviations.

Table 9. Means and standard deviations of the strategy scores to avoid the negative possible selves for participants who reported their possible selves (according to domains) as only negative or as balanced

	Negative only	Balanced
Academic achievement	M = 2.37 SD = 1.30 (n=8)	M = 2.25 SD = 1.03 (n=267)
Interpersonal relationship	M = 2.37 SD = 1.06 (n=48)	M = 2.57 SD = 0.93 (n=14)
Personality traits	M = 2.35 SD = 1.08 (n=77)	M = 2.75 SD = 0.99 (n=74)
Physical/ Health	M = 2.76 SD = 1.09 (n=17)	M = 2.71 SD = 0.75 (n=7)
Material/ Lifestyle	M = 2.20 SD = 1.05 (n=111)	M = 2.69 SD = 1.03 (n=39)

The independent samples t-tests revealed significant mean differences for the domain personality traits,  $t(149) = -2.399, p = .018$  and the domain material/ lifestyle,  $t(148) = -2.478, p = .014$  supporting the hypothesis that participants with balanced possible selves are more likely to have strategies to avoid their negative/ feared possible selves compared to participants with no balanced possible selves. No significant mean differences were found for the domains of interpersonal relationship and physical/health,  $t_s(273, 22) < 0.324, p < .05$ . Due to the small sample size of reported negative only possible selves in the domain of academic achievement, we excluded it from the analysis.

The Hypothesis 4 which stated that participants who have balanced possible selves are more likely to report strategies to reach their positive possible selves or to avoid the negative possible selves compared to participants without balanced possible selves could be confirmed for the domains of academic achievement, personality trait, and material/lifestyle. However, one needs to take into consideration that the distribution between balanced and non-balanced (either positive only or negative only) possible selves was rather unequal for the domains interpersonal relationships, physical/health and non-normative/negative. In the latter only three participants mentioned non-normative/negative possible selves as positive possible selves.

Finally, we tested for group differences within the social categories race, gender, and school environment with regard to the named positive possible selves only, negative possible selves only and balanced possible selves related to the domain of academic achievement. The Chi-Square tests revealed no relationship between naming academic achievement as positive possible selves only, negative possible selves only or balanced possible selves and race,  $\chi^2 (2) = 2.35, p = .308$ , gender,  $\chi^2 (2) = 5.56, p = .062$ , and school environment,  $\chi^2 (2) = 2.29, p = .318$ .

In sum, Hypothesis 4 stated that participants who are aware of both positive and negative possible selves within specific domains, that is, balanced possible selves, should have strategies in place to achieve their positive possible selves or to avoid their negative possible selves. This hypothesis could be confirmed for the domains academic achievement, personality traits, and material/lifestyle. The Chi-square results revealed no significant relationships between the social categories race, gender and school environment and naming a positive only, to be achieved possible selves, a negative only, to be avoided possible selves or having balanced possible selves.



## Career orientations and Inequality

### Preliminary analysis

The frequency for the career orientations as hierarchy-enhancing, middlers and hierarchy-attenuating are reported in Table 10 for the first and second named positive possible selves. The results indicated that 396 out of the 489 first mentioned possible selves related to academic achievement could be classified as career orientations (81%). A similar trend was found for the second mentioned possible selves related to academic achievement where 234 (80%) out of 290 represented career orientations (Chalk et al., 1994, 2005).

Moreover, the results suggest that the majority of participant selected middler careers, followed by hierarchy-enhancing and hierarchy-attenuating careers. Chi-square tests were conducted to establish the relationships between the social factors (race, gender, and school environment) and career orientations for the first and second named possible selves, separately (see Table 10 informing about the frequencies). The results showed that race did not relate to career orientation for the first named positive possible selves,  $\chi^2(2) = 4.04, p = .133$ . However, a significant relationship was identified for gender,  $\chi^2(2) = 39.01, p < .001$ , and for school environment,  $\chi^2(2) = 7.17, p = .028$ . Female participants reported significantly more often hierarchy-enhancing and –attenuating careers than males, whereas male participants reported significantly more middler careers than females. Participants from township schools reported significantly more often hierarchy-attenuating careers than participants from suburb schools.

With regard to the career orientations mentioned as second positive possible selves interdependencies were found for race,  $\chi^2(2) = 7.08, p < .05$ , gender,  $\chi^2(2) = 6.92, p < .05$ , and school environment,  $\chi^2(2) = 11.49, p < .01$ . Black participants reported significantly more often hierarchy-enhancing careers than white participants; whereas white participants

reported significantly more often middler careers than black participants. Female participants reported significantly more often hierarchy-attenuating careers than males; and participants from suburb schools reported significantly more often middler careers whereas township participants reported significantly more often hierarchy-attenuating careers.

Table 10. Distribution of participants reporting hierarchy-enhancing, middlers, and hierarchy-attenuating careers

	First positive possible selves as academic achievement (n=489)			Second positive possible selves as academic achievement (n=290)		
	Hierarchy- enhancing careers	Middler careers	Hierarchy- attenuating careers	Hierarchy- enhancing careers	Middler careers	Hierarchy- attenuating careers
All	107	205	85	80	111	43
Black	91	153	67	70	82	37
White	15	48	17	8	27	6
Male	37	122	19	37	57	12
Female	68	81	64	43	54	31
Suburb	37	55	14	20	34	4
Township	54	98	53	50	48	33

In sum, the majority of careers chosen were middlers, followed by hierarchy-enhancing and hierarchy-attenuating careers. When assessing group differences, the following overall trends were found: hierarchy-enhancing or –attenuating careers were

mainly chosen by female, Black and township school participants, whereas middler careers seem to be the choice for male, white and suburb school participants.

## Inequality

Inequality was assessed by two measures, namely general income inequality and family income inequality. Table 11 reports the descriptive statistics for both measures.

Table 11. Means and standard deviations of the inequality measures

	Perceived income gap	Preferred income gap	Legitimate in(equality)
<i>General</i>	3.55 (SD = 2.09)	2.37 (SD = 1.75)	1.14 (SD = 1.87)
<i>Family</i>	-0.79 (SD = 1.19)	- 0.21 (SD = 0.86)	0.54 (SD = 1.08)
<i>General</i>			
Black	3.49 (SD = 2.15)	2.35 (SD = 1.73)	1.07 (SD = 1.92)
White	3.75 (SD = 1.91)	2.43 (SD = 1.77)	1.30 (SD = 1.68)
<i>Family</i>			
Black	-1.01 (SD = 1.19)	-0.23 (SD = 0.94)	0.58 (SD = 1.09)
White	-0.12 (SD = 0.95)	-0.18 (SD = 0.58)	0.35 (SD = 1.00)
<i>General</i>			
Male	3.68 (SD = 1.96)	2.63 (SD = 1.76)	1.04 (SD = 1.58)
Female	3.45 (SD = 2.18)	2.16 (SD = 1.68)	1.20 (SD = 2.00)
<i>Family</i>			
Male	-0.78 (SD = 1.20)	-0.23 (SD = 0.98)	0.53 (SD = 1.06)
Female	-0.81 (SD = 1.18)	-0.20 (SD = 0.78)	0.57 (SD = 1.11)
<i>General</i>			

Suburb	3.68 (SD = 1.57)	2.51 (SD = 1.48)	1.17 (SD = 1.59)
Township	3.40 (SD = 2.37)	2.28 (SD = 1.84)	1.03 (SD = 2.06)
<i>Family</i>			
Suburb	-0.67 (SD = 0.90)	-0.11 (SD = 0.59)	1.06 (SD = 1.37)
Township	-1.17 (SD = 1.28)	-0.28 (SD = 1.07)	0.47 (SD = 0.99)

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With regard to the general inequality measure (see Table 11 under *General*), the findings suggest that participants perceive and prefer to a certain degree that the CEO earns/should earn more than the worker. However, due to the fact that the perceived income gap is larger than the preferred income gap, the legitimate in(equality) measure indicates that the existing difference is perceived as illegitimate.

With regard to the family inequality measure, the findings (see Table 11 under *Family*) first suggest that participants perceive an income gap between black and white families, in that Black families earn less than white families. Second, participants seem to prefer an income gap between Black and white families, in that white families should earn more than Black families. However, because the perceived income gap is larger than the preferred income gap, the current differences are perceived as illegitimate.

Moreover, independent samples t-tests were conducted to establish whether race, gender and school environment differences exist with regard to the general and family inequality measures (see Table 11). The comparison between Black and white participants revealed only significant differences in the perceived income gap for families,  $M_{\text{Black}} = -1.01$ ,  $SD_{\text{Black}} = 1.19$ ;  $M_{\text{white}} = -0.12$ ,  $SD_{\text{white}} = 0.94$ ,  $t(476) = 7.94$ ,  $p < .001$ . As the means indicate, Black participants perceive a larger income gap between black and white families in that Black families have much less income; whereas white participants perceive a smaller gap. The comparison between males and females revealed only significant differences in

the preferred income gap of the general inequality measure,  $M_{\text{males}} = 2.63$ ,  $SD_{\text{males}} = 1.76$ ;  $M_{\text{females}} = 2.16.12$ ,  $SD_{\text{females}} = 1.68$ ,  $t(576) = 3.25$ ,  $p = .001$ , suggesting that males preferred a larger difference in the income of CEOs relative to workers than females. The comparison between suburb and township school participants revealed significant differences with regard to perceived, preferred and legitimate income differences between Black and white families. First, suburb school participants ( $M = -0.67$ ,  $SD = 0.90$ ) perceived a smaller income gap between Black and white families than township school participants ( $M = -1.17$ ,  $SD = 1.27$ ),  $t(379.28) = 4.74$ ,  $p < .001$ . Second, suburb school participants ( $M = -0.11$ ,  $SD = 0.59$ ) preferred a smaller income gap between Black and white families than township school participants ( $M = -0.28$ ,  $SD = 1.07$ ),  $t(433.72) = 2.14$ ,  $p < .05$ . Finally, suburb school participants ( $M = 1.06$ ,  $SD = 1.37$ ) perceived the current income gap between Black and white families more illegitimate than township school participants ( $M = 0.46$ ,  $SD = 0.99$ ),  $t(145) = 2.64$ ,  $p < .01$ .

The overall results for the general income inequality measure suggest that participants perceive and prefer that CEOs earn/should earn more than workers. Group differences were found that male participants prefer larger income gaps between CEOs and workers when compared to female participants. For the family income inequality measure it was found that participants perceived an income gap between Black and white families, in that white families were perceived as having more income available than Black families. In terms of group differences the results revealed that white and Black suburb school participants perceived the income inequality between Black and white families as not so severe when compared to Black township school participants. However, Black suburb school participants prefer less inequality than Black township school participants. Thus Black suburb school participants perceive a larger income gap than they would prefer and this indicates that they view the current inequality as more illegitimate.

The present study also aimed to understand the interplay between inequality and career orientations. Thus, Hypothesis 5 stated that participants with preference for equality are more likely to choose hierarchy-attenuating careers (that is to say, possible selves within the academic achievement domain) that are aimed at reducing inequality; whereas participants with preference for inequality are more likely to choose hierarchy-enhancing careers (i.e., possible selves within the academic achievement domain) that are aimed at maintaining inequality.

### **Hypothesis testing**

Hypothesis 5 was first tested by comparing participants who chose hierarchy-enhancing, middlers, or hierarchy-attenuating careers with regard to their preferences for the general income gap. To confirm Hypothesis 5 one would expect that participants who chose hierarchy-enhancing careers should score higher on the preference for inequality than participants who chose middler or hierarchy-attenuating careers. The Analysis of Variance revealed that participants choosing a hierarchy-enhancing career reported a preferred general income gap ( $M = 2.73$ ,  $SD = 2.17$ ,  $n = 104$ ) that was marginally larger when compared to participants choosing hierarchy-attenuating careers ( $M = 2.15$ ,  $SD = 1.34$ ,  $n = 84$ ) but not when compared to participants choosing middler careers ( $M = 2.41$ ,  $SD = 1.58$ ,  $n = 197$ ),  $F(2, 382) = 2.71$ ,  $p = .06$ , Bonferroni correction ( $p < .06$ ). Consequently, Hypothesis 5 was only partially supported by the present study.

Hypothesis 5 further assumed that participants with preference for inequality and thus hierarchy-enhancing career orientations are most likely to belong to dominant groups (i.e., high income groups) and participants with preference for equality and thus hierarchy-attenuating career orientations are most likely to belong to sub-ordinate groups (i.e., low income groups). As outlined in the preliminary analysis section, the current results revealed that the majority of participants selected middler careers. Moreover, the results

addressing group differences revealed that hierarchy-enhancing and –attenuating careers were mainly chosen by female, Black and township school participants, whereas middler careers seem to be the choice for male, white and suburb school participants. These results contradict the assumptions stipulated in Hypothesis 5 which assumed that hierarchy-enhancing career orientations are most likely in dominant groups (i.e., high income groups) and hierarchy-attenuating career orientations are most likely in sub-ordinate groups (i.e., low income groups).

Given that Hypothesis 5 was not strongly supported the question arose who are actually the adolescents with hierarchy-enhancing or –attenuating career orientations? To answer this question a logistic regression was conducted in which career orientations (as either enhancing – coded as 1 – or attenuating – coded as 0) was included as categorical dependent variable and the inequality measures (i.e., perceived general income gap, preferred general income gap, perceived family income gap and preferred family income gap) were entered as independent variables.

The model fit statistics,  $\chi^2(4) = 14.243, p = .007$ , suggested that the inclusion of the independent variables improved the model significantly when compared to the model only including the constant. This interpretation is supported by the results of the Hosmer and Lemeshow Test,  $\chi^2(8) = 11.60, p = .170$ , which was not statistically significant indicating a well-fitting model. The model explained only 10% (Nagelkerke  $R^2$ ) of the variance of career orientations and correctly classified 56.5% of cases (81.6% for hierarchy-enhancing and 18.1% for hierarchy-attenuating). The analysis of the contribution of the individual independent variables in explaining the variance in the dependent variable using the Wald statistics revealed that only the variable “perceived general income gap” significantly predicted career orientation,  $B = .314, SE = 0.106, Wald(1) = 8.734, p = .003, \text{Exp}(B) = 1.1369, 95\% \text{ CI for } \text{Exp}(B) [1.111, 1.685]$ , indicating that those who perceive large income

gaps between CEO and worker are more likely to choose hierarchy-enhancing careers than those who perceive a small income gaps between CEO and worker.

A second model was tested where the variables race and gender were added into the model. Thus, career orientations (as either enhancing or attenuating) was entered as categorical dependent variable, the inequality measures were entered as continuous independent variables and race and gender were included as categorical independent variables. Note that we did not include school environment because it interacted with race as shown when reporting on participants. This model was also statistically significant,  $\chi^2(6) = 17.607$ ,  $p = .007$  explaining 12.3 % (Nagelkerke  $R^2$ ) of the variance in the dependent variable. The model correctly classified 59.3%% of the cases (70.3% for hierarchy-enhancing and 45.7% for hierarchy-attenuating). The analysis of the contribution of the individual independent variables using the Wald statistics revealed again that only the variable “perceived general income gap” significantly predicted career orientation,  $B = .317$ ,  $SE = 0.112$ ,  $Wald(1) = 8.028$ ,  $p = .005$ ,  $Exp(B) = 1.1374$ , 95% CI for  $Exp(B)$  [1.103, 1.711], suggesting again that those who perceive large income gaps between CEO and worker are more likely to choose hierarchy-enhancing careers than those who perceive a small income gaps between CEO and worker.

The present research further assumed that the choice of possible selves is not only determined by the present/experienced social context but also the social context adolescents envision for the future.



## Collective Future as Societal Change

### Preliminary analysis

Table 12 reports the means of the societal change dimensions, namely societal development and societal dysfunction (Bain et al., 2013). The means pattern of societal development and societal dysfunction suggest that participants tend to believe that societal development will be more common in the future compared to present-day than societal dysfunction.

Table 12. Means and standard deviations of the collective futures dimensions

	Societal development (n = 620)	Societal dysfunction (n = 622)
All	M = 7.67 (SD = 1.97)	M = 6.95 (SD = 2.17)
Black (n = 467)	M = 7.86 (SD = 1.98)	M = 6.96 (SD = 2.11)
White (n = 138)	M = 7.03 (SD = 1.81)	M = 7.05 (SD = 2.41)
Male (n = 269)	M = 7.84 (SD = 1.87)	M = 6.82 (SD = 2.15)
Female (n = 335)	M = 7.52 (SD = 2.04)	M = 7.07 (SD = 2.19)
Suburb (n = 147)	M = 7.57 (SD = 1.75)	M = 7.42 (SD = 1.92)
Township (n = 320)	M = 7.99 (SD = 2.07)	M = 6.75 (SD = 2.16)

Independent samples t-tests were conducted to assess differences within the three social factors race, gender and school environment. Black,  $t(603) = -4.366, p < .001$ , male,  $t(602) = -1.97, p = .049$ ; and township participants,  $t(603) = -4.366, p < .001$ , perceive more societal development in the future of South Africa than, white, female and suburb participants (see means in Table 12). In terms of societal dysfunction the only significant difference was found in school environment, with suburb school participants anticipating more societal dysfunction when compared with township school participants,  $t(467) = 3.223, p < .001$ , but not for race,  $t(605) = .432, p = .666$ , and gender,  $t(604) = -1.40, p = .162$  (see means in Table 12).

### **Hypothesis testing**

Hypothesis 6 stated that participants who perceive a collective future of societal development should report more possible selves than negative possible selves, whilst participants who perceive a collective future of societal dysfunctionality should report more negative possible selves than positive possible selves. Furthermore, it was assumed that the beliefs about of societal development and dysfunctionality in the future of South Africa influence the career orientations of adolescents.

Hypothesis 6 was first tested by comparing participants' positive and negative possible selves who perceived very low ( $\leq 6.56, n = 146$ ), low ( $> 6.561$  and  $< 7.87, n = 148$ ), high ( $> 7.88$  and  $< 9.12, n = 144$ ) and very high ( $\geq 9.13$  or  $= 11, n = 132$ ) societal development and who perceived very low ( $\leq 5.35, n = 140$ ), low ( $> 5.36$  and  $< 7.18, n = 141$ ), high ( $> 7.19$  and  $< 8.68, n = 144$ ) and very high ( $\geq 8.69$  or  $= 11, n = 146$ ) societal dysfunctionality. The results of the Analysis of Variance revealed that the different beliefs in the societal development did not influence either positive,  $F(3,566) = 1.32, p = .265$ , or negative possible selves,  $F(3,548) = 1.84, p = .315$ , which means that participants who share a positive outlook on societal development did not report more positive and less

negative possible selves than participants who share a negative outlook. Similarly, the different beliefs in the societal dysfunctionality did also not influence either positive,  $F(3,567) = 0.621, p = .641$ , or negative possible selves,  $F(3,549) = 0.452, p = .716$ . These results do not support Hypothesis 6.

Secondly, a logistic regression was performed testing whether the beliefs in societal development or dysfunctionality predicts career orientations. Again, the dependent variable career orientation was coded as either hierarchy-enhancing career orientation (1) or as hierarchy-attenuating career orientation (0) which was included as categorical dependent variable. The variables societal development and societal dysfunctionality were entered as independent variables. The model fit statistics,  $\chi^2(2) = 0.592, p = .744$ , suggests that the inclusion of the two independent variables did not improve the model significantly when compared to the model only including the constant. This suggests that the beliefs about societal development and dysfunctionality in the future of South Africa are not related to the career orientations of adolescents.

## **GENERAL DISCUSSION**

The overall aim of the present study was to explore possible selves of adolescent participants within the context of South Africa. In line with the Theory of Possible Selves (Markus & Nurius, 1986) and related research, Hypothesis 1 stated that the majority of possible selves reported by participants would relate to academic achievement and interpersonal relationships (Anthis et al., 2004; Oyserman et al., 2002, 2006, 2007; Sheppard & Marshall, 1999). The hypothesis was partially confirmed in that participants reported significantly more possible selves related to the domain academic achievement. However, possible selves related to the domain of interpersonal relationships were not as frequently reported when compared to the remaining domains. The results further revealed

that possible selves related to the academic achievement domain were particularly salient for female participants (in comparison to male participants) as well as Black suburb school participants (in comparison to Black township school participants).

These results are in line with previous findings affirming that adolescents tend to report more possible selves related to academic achievement (Oyserman et al., 2002, 2006, 2007; Sheppard & Marshall, 1999). Moreover, these results are not surprising if the current South African context as a developing society is taken into consideration. South Africans are always reminded that education is the key to a better life for them. Likewise, in developing countries education is emphasised by internal and external sources as a means to uplift the country (Leach, 1995).

In the present study the domain of interpersonal relationships was found to be less relevant than expected and when compared to the remaining domains. On the one hand, these results are surprising against the background that adolescence is a stage of finding oneself, thinking about the future including peers, family and society (Erikson, 1968; Seginer, 2009). Moreover, during adolescence individuals are aware of and are sensitive to how others perceive them (Oyserman et al., 2004). On the other hand, research focused on cultural differences and their influence on the choice of possible selves found similar trends as the present study. For instance, Unemori et al. (2004) found that minority groups such as Japanese, Japanese-American and Chilean students did not mention possible selves related to the domain of interpersonal relationships as much as the majority group of European-American students. These authors concluded that because education defines the future particularly for minority groups, academic activities are construed to form part of their social relationships. Thus relationships as outside of the academic context are rather uncommon, that is, their current and envisioned social networks are not construed as an explicit or an autonomous goal (Unemori et al., 2004).

Although the explanation of the dominance of the domain of academic achievement and its relationship to interpersonal relations might be applicable for the findings of the present study, the related minority versus majority explanation does not hold because these results were found in both Black and white participants. One could argue that given the fact that South Africa has been and is experiencing severe social change, the definition of minority versus majority is rather ambiguous not only for researchers but also for South Africans themselves (Dumont & Waldzus, 2015). The latter might mean that both Black and white participants construe education as “to define their future”, even though these definitions might start from different vantage points. For instance, it is likely to assume that particularly female participants and Black suburb school participants construe education as means for upward mobility whereas for instance white male participants construe education to enable them to compete in a context of institutionalised social change such as affirmative action. However, this explanation needs to be tested in further studies.

The second hypothesis stated that participants would generate more positive than negative possible selves. The findings of the present study confirmed Hypothesis 2 yet with the specification that adolescents tend “to find it easier” to report positive than negative/feared possible selves related to academic achievement. This trend is in line with previous research (Cross & Markus, 1991, Robinson et al., 2003). Moreover, the results revealed that although Black participants did not differ from white participants in reporting less feared and more positive possible selves related to the domain of academic achievement, they however reported on average significantly more positive possible selves than white participants. It was also found that although Black suburb school participants reported as Black township school participants more positive than feared possible selves related to academic achievement, they however reported on average significantly more feared possible selves than Black township participants. These two trends might be the

result of different experiences of social change within the South African context. First, that Black participants reported on average more positive possible selves than white participants might mirror the general trend of transformation in South Africa which aims to redress the consequences of systematic exclusion of Black South Africans from social and economic resources. The latter means that Black South Africans are those who have a lot to gain from these social and economic changes which might translate in the perceptions of many and various opportunities, e.g., positive possible selves. Second, the trend that Black suburb school participants reported more feared possible selves than Black township participants can be explained in two ways. From the perspective of Black suburb school participants it can be that feared possible selves are more salient because of their experienced stereotype threat (Kao, 2000; Oyserman & Destin, 2010; Oyserman et al., 2004, 2006). As much as intergroup contact decreases intergroup conflict it might trigger Black suburb school participants to be reminded of negative stereotypes about their in-group which might result that they focus more on the avoidance of these negative stereotypes. Alternatively, one could also argue that feared possible selves are less salient for Black township school participants because they might be less fearful of academic failure in particular and failure in general due to the fact that most of them are living under challenging circumstances (e.g., in low-income areas like townships). Therefore they might already have coping strategies in place to deal with such challenges (see Study on low-income women conducted by Robinson et al., 2003). Again, these explanations need to be explored in further studies.

Hypothesis 3 addressed balanced possible selves, that is, positive and negative possible selves in the adolescents' salient domains. The aim was to assess whether participants acknowledged or were aware of that there are both positive and negative aspects of the possible self in the academic achievement and interpersonal relationship

domains. The present results revealed that participants reported a high number of academic-achievement related possible selves that are in balance when compared to the other domains. For the domains interpersonal relationship, personality traits, physical/health, material/lifestyle and non-normative/feared possible selves, the majority of participants mentioned these as negative to be avoided possible selves. Lastly, almost all (98.7%) participants mentioned non-normative/feared possible selves as negative to be avoided possible selves.

These results suggest that participants of the present study were aware of both positive and negative aspects of possible selves which are related to academic achievements. This can be considered as a positive finding since balance in the domain academic achievement has been found to predict school performance positively (Oyserman et al., 2005, Robinson et al., 2003). However, the results also showed that the majority of participants tended to name predominantly negative possible selves in the remaining domains. These results are rather concerning given that feared possible selves are less effective motivators when they are not balanced with clear and well developed expected positive possible selves (Unemori et al., 2004). The findings that almost all participants mentioned non-normative possible selves as negative possible selves can be seen as an indication that participants of the present study tend to conform to existing social norms since they do not aspire non-normative possible selves as positive possible selves.

Moreover, the present study showed that participants with balanced possible selves are more likely to report strategies to reach their positive possible selves or to avoid the negative possible selves compared to participants without balanced possible selves (Hypothesis 4). This was confirmed for the domains academic achievement, personality traits, and material/lifestyle. Moreover, no significant relationships were found between participants' race, gender and school environment and whether they named only positive

possible selves, only negative possible selves or balanced possible selves. These results underline the importance of balanced possible selves in that the awareness of the positive and negative effect of possible selves determines that adolescents not only consider the outcome (irrespective whether it is positive or negative) but also the way toward the outcome. Therefore it is not surprising that balanced possible selves in the domain academic achievement predicts school performance (Oyserman et al., 2005, Robinson et al., 2003) because pupils not only envision to be good (or avoid to be bad) academically but apply concrete strategies such as studying hard.

Overall the results of the present study showed that South African adolescent participants' dominant possible selves within the domain of academic achievement were mainly positive or balanced and, if balanced they were accommodated by strategies to reach their positive possible selves or avoid their negative possible selves. The results further showed that the majority of academic possible selves were actually career orientations (see also Chalk et al., 1994, 2005), which suggests that when our participants thought about their personal future selves – they were thinking about their careers.

Beyond previous research on possible selves, the present study aimed to broaden the concept of social context by not only focusing on social factors such as gender, ethnicity and school environment, but also by including participants' perceptions of inequality and their shared beliefs about the future of South Africa.

With regards to the perceptions of inequality and how these influence career orientations, Hypothesis 5 stated that participants with preference for equality are more likely to choose hierarchy-attenuating careers, that is, careers that are aimed at reducing inequality; whereas participants with preference for inequality are more likely to choose hierarchy-enhancing careers, that is, careers that are aimed at maintaining inequality.

Social Dominance Theory suggests that the context in which an individual finds him/herself



plays a role in the manner in which this individual construes career orientation as a means for social change (Sidanius & Pratto, 1999). Previous research has shown that individuals select certain careers based on their social dominance orientation, that is to say, whether they support or reject inequality (Pratto et al., 1994). The expectation was that a *preference* for income inequality would lead to hierarchy-enhancing career orientations which should be mainly found in participants belonging to the dominant group (i.e., white, males and suburb school pupils). However, the results showed the opposite. First, participants who perceived a large general income gap (between CEO and worker) were more likely to choose hierarchy-enhancing careers than those who perceived a small general income gap. Moreover, as reported in the preliminary analysis section, hierarchy-enhancing careers were mainly chosen by females participants (when compared with male participants), Black participants (when compared with white participants) and Black township school participants (when compared with Black suburb school participants) who represent from a socio-economic perspective the sub-ordinate groups within the South African context. Thus these results do not correspond with previous findings (Pratto et al., 1994). There might be two possible reasons. First, the used inequality measure in the present study does not represent a proxy measure for social dominance orientation as assumed. Second, the South African context might be different to the societal contexts in which previous research on the relationship between social dominance orientation and career orientations were conducted (as an example these studies have been conducted mainly in Canada and the United States of America; Pratto et al., 1994, 1997). As mentioned before, South Africa is experiencing severe social change particularly to the benefit of members of the sub-ordinate groups. The question arises, why members from a sub-ordinate group who perceive inequality chose hierarchy-enhancing careers within a context of social change? It could be that those participants who perceive inequality are actually interested to maintain inequality

(by choosing hierarchy-enhancing careers) but for the benefit of their own group, in that the ingroup who is the sub-ordinate group of today will be the dominant group of the future. This explanation implies further that those members from the sub-ordinate group might not trust or might not have much confidence into the “institutionalized” social change aiming for equality (Dumont & Waldzus, 2015). Alternatively, it could also be that hierarchy-enhancing institutions (and thus careers) are actually construed as hierarchy-attenuating institutions within the context of social change. Thus, within a context of social change, careers such as business executive might not be considered as a career that maintains inequality but as career that brings equality. However, these explanations are still speculations until tested in future research.

To assess social change in the distal future, Hypothesis 6 stated that participants who perceived a collective future of societal development should report more positive than negative possible selves, whilst participants who perceived a collective future of societal dysfunctionality should report more negative than positive possible selves. Furthermore, it was assumed that the beliefs about of societal development and societal dysfunctionality in the future of South Africa would influence the career orientations of adolescents. The results of the present study revealed that neither the dimension of societal development nor societal dysfunctionality influenced participants’ choice of either positive or negative possible selves. Moreover, the results showed that beliefs that participants shared about societal development or societal dysfunctionality were not related to their career orientation. These results suggest that shared beliefs about the distant future of a society have seemingly limited influence on individuals’ present choices for their future selves. As reported in the preliminary analysis, the mean patterns of the Collective Futures showed that participants tend to believe that there will be more societal development than societal dysfunctionality in the future when compared to the present-day situation. These results are

in line with previous studies which found that individuals anticipated societal development, interpreted as technology and economic development, as these provide means for the achievement of social goals (Bain et al., 2013, 2015; Milfont et al., 2014). Furthermore, the trend for societal development was found to be more mentioned by Black (relative to white) participants, male (relative to female) participants and Black township school (relative to Black suburb school) participants. Black suburb school participants, on the other hand, anticipated more societal dysfunctionality when compared to Black township participants.

These findings might be explained in the following manner. First, considering the fact that the Collective Futures Framework has been mainly used to study the influence of future social issues on present-day action, it might not be the most appropriate construct to assess the interrelationship between personal futures and shared beliefs about the futures of a society. Second, previous studies on Collective Futures have been conducted in more stable societies including Australia and Japan (Bain et al., 2013, 2015; Milfont et al., 2014), whereas the South African context is characterised by ongoing social change aiming to benefit the previously disadvantaged groups. In the present study members of these groups were the ones who envisaged more societal development (e.g., female participants, Black participants and township participants). This might be because these participants have been experiencing severe inequality and to them societal development may be seen as enabling a better future (Bain et al., 2015). The findings that Black suburb school participants anticipated more societal dysfunctionality when compared to Black township school participants might result from the fact that they view societal development differently, in that, societal development is perceived as being accompanied not only by positive but also by negative outcomes (e.g., climate change). However, these explanations are speculative and require further assessment.

Although the present study provided empirical support for most of the proposed hypotheses, there are limitations to take note of. First, due to the scope of the present study convenience sampling was used. That means that we are not able to generalise the results of this study beyond the study sample. Future studies might employ rather probabilistic sampling techniques in order to overcome this limitation.

Second, this was a cross-sectional study, measured at one point in time. Therefore, this study cannot make reference to changes in possible selves over time. For future studies, a longitudinal design (Frazier et al., 2000) would provide more information and further aid in the understanding of possible selves over time especially within the context of social change. Social change as experienced in the South African context is not static because it is ongoing and occurring all the time. A cross-sectional study cannot aptly capture how individuals conceptualise all these changes. Alternatively, future research could also employ cross-sectional research designs with a range of age groups throughout the different provinces of South Africa to be able to compare possible selves at different ages with different social/ ethnic influences. The results of such studies could be different considering that participants in the current study lived close to major cities and are likely to be influenced by the urban culture.

Third, Social Dominance Orientation as a general psychological orientation to support inequality was not directly measured in the present study (Pratto et al., 1994). Instead, support for inequality was assessed using the Jasso (2007) measure. It can be assumed that inequality is a rather complex construct. While the Jasso (2007) measure focusses on the perception and preference of income inequality between two extreme income groups (i.e., worker versus CEO), the measure of social dominance orientation focuses more generally, on the preference of inequality among different groups. These different foci might be an indication that the Jasso (2007) measure was not the most

appropriate measure to infer to participants' social dominance orientations. Future research should apply the original Social Dominance Orientation measure (Pratto et al., 1994).

Lastly, although the Collective Futures approach (Bain et al., 2013) was used to demonstrate that anticipations people share about future issues in a society, influence their present actions to mitigate these possible future issues, it might not be the most appropriate approach for assessing beliefs of the future and their impact on possible selves. The latter might be because of the measurement instruction which asked about the future in 50 years' time. This rather distant time point might not have been foreseeable for our participants and they therefore construed it not necessarily as a reality (Combs, 2015; Milfont et al., 2014). It might be therefore advisable that future studies use different methodologies that will allow individuals to construe the future as a reality.

Notwithstanding these limitations, the present research does contribute to research in various areas. First, the present study complements research based on the Theory of Possible Selves. Different to previous research, the present research studied possible selves as domain-specific and explored both balanced possible selves and strategies. This approach allowed specifying that the interrelation between possible selves, balance and strategies are domain specific for adolescents, in that this relationship was only found for the domain of academic achievement.

Second, the present study is - to the knowledge of the author - the only study that systematically addressed and assessed possible selves within the South African context. Different to the present study, Van Breda (2010) developed an intervention programme which was based on the Theory of Possible Selves and which was conducted with vulnerable and orphaned teenagers living in a home for children located in a South African Township. Although, Van Breda's study did not provide a rigorous evaluation of the programme which makes it difficult to compare any results, the reported personal

experience (van Breda, 2010, pp. 190-191) corresponds with the findings of the present study in that possible selves are important to engage adolescents to be able to think about their own future more clearly.

Thirdly, with an understanding that possible selves are socially determined, the present study extended the common understating of social context as social identity- related (e.g., race, gender, school type) to a social context that also includes shared beliefs about relevant social issues such as inequality or the future of society. Although the results of the present study did not provide clear-cut answers they showed however, the importance to consider the influence of shared beliefs about social issues on present actions such as choosing possible selves (see also Bain et al., 2013).

Lastly, the findings that the majority of possible selves referred to career orientations suggests that the concept of possible selves might be useful theoretically and practically for the psychology of career development and thus for counsellors. Most young people choose careers based on influences from their family, school and their community (O'Brien & Fassinger, 1993). Being able to include the personalised view of the self, as is the case with possible selves, is essential in career planning (Ferry, 2006; Meara, et al., 1995). Thus, adolescents will be able to understand the relevance of school work and see the connection between doing well in school now and finding a meaningful career in the future. This will lead to adolescents who are more engaged in school activities, more focused on their future goals and are aware not only of the many opportunities but also of the possible barriers. In a context such as South Africa, where there are threats of unemployment and poverty, possible selves could serve to provide personal reflections and provide a structure for occupational options that individuals might not have considered yet (Ferry, 2006, van Breda, 2010).

Irrespective of the contributions that the present study made to the various research areas, it also raised various questions that should be addressed in future research. Firstly, the results showed that adolescent participants' dominant possible selves within the domain academic achievement were balanced and accompanied by strategies to reach the positive possible selves. A future study could address the question whether the relationship between balanced possible selves and strategies people have to achieve the positive and/or avoid the negative possible selves is limited to salient possible selves? For instance, a future study could compare the relationship between balanced possible selves and strategies for younger and older people. If the relationship is limited to salient domains, one would assume to find it in the domain of physical/health in older participants (Cross & Markus, 1991; Frazier et al., 2002; Hooker & Kaus, 1992) and in the domain of academic achievement in younger participants.

Secondly, as outlined in the introduction section possible selves represent all three levels of self-representation as proposed by Brewer and Gardner (1996). That is to say, possible selves represent the individual (i.e., domain of personality traits), the relational (i.e., domain of interpersonal relationships) and the collective (e.g., career orientations) level of the self. The question that arises is whether possible selves representing these three levels of the self are interrelated and if so, how? Furthermore, by relating possible selves to the different levels of self-representation one could also consider to relate possible selves to the individual versus social identity dimension as proposed by Social Identity Theory (Tajfel & Turner, 1986). The latter would raise the question whether individuals distinguish between possible personal identities and possible social identities (Cinnirella, 1998) when thinking about their future?

Besides the outstanding questions as outlined above, the present study contributed not only to highlight the importance of research into possible selves as a theoretical concept

but also its usefulness in practical terms. Consequently, the concept of possible selves is not only useful to theoretically conceptualise adolescents' expectations of their future but also suitable to practically guide and support them in envisioning and achieving their future expectations.



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## **APPENDIX**

### **A1 - Consent form for parents**

Future orientation as possible selves: Balanced hopes and fears of South African adolescents

Dear Parent

My name is Nonhlanhla Cleopatra Masinga and I am doing research with Prof. Kitty Dumont a Professor in the Department of Graduate Studies towards Masters of Science in Psychology at the University of South Africa. We are inviting your son/ daughter to participate in a study titled Future orientation as possible selves.

The aim of the study is to find out how adolescents envisage the future of South Africa in 50 years' time. Approximately 300 to 500 adolescents will be invited to participate.

Adolescence is an exciting period in a person's life where current decisions have an impact in one's adult life.

The study involves completing a questionnaire which will take about 30 minutes to complete. The school has been requested to afford the researcher Life Orientation class time for learners to complete the questionnaire. Learners are free to withdraw at any time, participation is voluntary and learners are under no obligation to complete the questionnaire. Learners are free to withdraw at any time before completing and/ or submitting the questionnaire.

There are no potential benefits and there is no foreseeable harm in participating in this study. All responses will be kept confidential; there is no space for participants to write their names. Only the researcher and her supervisor will have access to the completed



questionnaires. The completed questionnaires will be stored in a locked cupboard in the researcher's study for a period of 5 years after completion of Masters studies. Future use of the stored data will be subject to further Research Ethics Review and approval. After 5 years the completed questionnaires will be shredded. The study has received approval from Unisa's internal ethics committee of the College of Human Sciences. A copy of the approval letter is available if required.

Should you require any further information on the study, or should you wish to be informed of the findings, feel free to contact Nonhlanhla Masinga on [31002846@mylife.unisa.ac.za](mailto:31002846@mylife.unisa.ac.za)

Thank you for taking the time to read this information sheet and for allowing your child to participate in this study.

Yours sincerely,

Nonhlanhla Masinga

## A2 - Ethical approval letter from the Department of Education



### GAUTENG PROVINCE

Department: Education  
REPUBLIC OF SOUTH AFRICA

For administrative use:  
Reference no. D2014/206 G

### GDE GROUP RESEARCH APPROVAL LETTER

Date:	19 August 2013
Validity of Research Approval:	19 August 2013 to 20 September 2013
Name of Supervisor/s:	Prof. K.B. Dumont
Name/s of Researchers	Maseko S.; Masinga N. and Knoetze L.
Address of Supervisor:	UNISA
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Research Topic:	Social Mobility: Possible Selves
Number and type of schools:	FOUR Secondary Schools
District/s/HO	Ekurhuleni South; Johannesburg East; Tshwane North and Tshwane South

#### **Re: Approval in Respect of Request to Conduct Research**

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the

*Makhele 2013/08/20*  
**Making education a societal priority**

#### **Office of the Director: Knowledge Management and Research**

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